



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20161209000
BOM changes for Selected Device(s)
Change Notification / Sample Request

Date: December 15, 2016
To: TOKYO ELECTRON DEVICE (DSTR) PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services

20161209000
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
LM2734XMK/NOPB	null
LM5008MM/NOPB	null
LMR12010XMK/NOPB	null
LM2734YMK/NOPB	null
LM2736XMK/NOPB	null
LM5033MM/NOPB	null
LMR62421XMFE/NOPB	null
LM25011MY/NOPB	null
LM5020MM-2/NOPB	null
LMR62421XMF/NOPB	null
LM3410XMFE/NOPB	null
LM3481MM/NOPB	null
LM5020MM-1/NOPB	null
LM2736YMK/J7003058	null
LM2736YMK/NOPB	null
LM5008MMX/NOPB	null
LMR12010XMKE/NOPB	null
LM2830XMF/NOPB	null
LM2736YMKX/NOPB	null
LMR10515XMF/NOPB	null
LM5009MM/NOPB	null

Technical details of this Product Change follow on the next page(s).

PCN Number:	20161209000		PCN Date:	Dec. 15, 2016																												
Title:	BOM changes for Selected Device(s)																															
Customer Contact:	PCN Manager	Dept:	Quality Services																													
Proposed 1st Ship Date:	March 15, 2017		Estimated Sample Availability:	Date provided at sample request																												
Change Type:																																
☐	Assembly Site	☐	Design	☐	Wafer Bump Site																											
☒	Assembly Process	☐	Data Sheet	☐	Wafer Bump Material																											
☒	Assembly Materials	☐	Part number change	☐	Wafer Bump Process																											
☐	Mechanical Specification	☐	Test Site	☐	Wafer Fab Site																											
☐	Packing/Shipping/Labeling	☐	Test Process	☐	Wafer Fab Materials																											
				☐	Wafer Fab Process																											
PCN Details																																
Description of Change:																																
Texas Instruments is pleased to announce updated BOM options for the devices in the 2 groups shown below in the Product affected section. Group #1 devices are being qualified with a new bond wire option the device in Group #2 is being qualified with a new BOM set: Group 1 Devices: <table border="1"> <thead> <tr> <th>Pkg Family</th> <th>Current Wire</th> <th>Additional Wire</th> </tr> </thead> <tbody> <tr> <td>VSSOP</td> <td>Au 1.3 mils</td> <td>Cu, 1.3 mils</td> </tr> <tr> <td>SOT</td> <td>Au 1.3 mils</td> <td>Cu, 1.3 mils</td> </tr> <tr> <td>SOT_a</td> <td>Au 1.0 mils</td> <td>Cu, 1.0 mils</td> </tr> </tbody> </table> Group 2 Device: <table border="1"> <thead> <tr> <th>Material</th> <th>Current</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>Wire (mils)</td> <td>Au, 0.80, 0.90 mils</td> <td>Cu, 0.96 mils</td> </tr> <tr> <td>Lead Frame Thickness</td> <td>10 mils</td> <td>6 mils</td> </tr> <tr> <td>Mount compound</td> <td>4042500</td> <td>4147858</td> </tr> <tr> <td>Mold compound</td> <td>4205694</td> <td>4211880</td> </tr> </tbody> </table>						Pkg Family	Current Wire	Additional Wire	VSSOP	Au 1.3 mils	Cu, 1.3 mils	SOT	Au 1.3 mils	Cu, 1.3 mils	SOT_a	Au 1.0 mils	Cu, 1.0 mils	Material	Current	Proposed	Wire (mils)	Au, 0.80, 0.90 mils	Cu, 0.96 mils	Lead Frame Thickness	10 mils	6 mils	Mount compound	4042500	4147858	Mold compound	4205694	4211880
Pkg Family	Current Wire	Additional Wire																														
VSSOP	Au 1.3 mils	Cu, 1.3 mils																														
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Mount compound	4042500	4147858																														
Mold compound	4205694	4211880																														
Reason for Change:																																
Continuity of supply. 1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties 2) Maximize flexibility within our Assembly/Test production sites. 3) Cu is easier to obtain and stock																																
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):																																
None																																
Anticipated impact on Material Declaration																																
☐	No Impact to the Material Declaration	☒	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI ECO website .																													

Changes to product identification resulting from this PCN:

None

Product Affected:**Group 1 Devices:**

Device	Package Family	Device	Package Family
BQ2022ADBZR	SOT_a	LM34922MYX/NOPB	VSSOP
BQ2022ADBZRG4	SOT_a	LM34923MM/NOPB	VSSOP
EMB1408MME/NOPB	VSSOP	LM34923MMX/NOPB	VSSOP
EMB1420MME/NOPB	VSSOP	LM5006MM/NOPB	VSSOP
HPA01220DBZR	SOT_a	LM5006MMX/NOPB	VSSOP
LM25011AMY	VSSOP	LM5007MM/S7003020	VSSOP
LM25011AMYE	VSSOP	LM5008AMM/NOPB	VSSOP
LM25011AMYX	VSSOP	LM5008AMMX/NOPB	VSSOP
LM25011MY/NOPB	VSSOP	LM5008MM	VSSOP
LM25011MYX/NOPB	VSSOP	LM5008MM/NOPB	VSSOP
LM2734XMK/NOPB	SOT	LM5008MMX	VSSOP
LM2734XMKX/NOPB	SOT	LM5008MMX/NOPB	VSSOP
LM2734YMK	SOT	LM5009AMM/NOPB	VSSOP
LM2734YMK/J7001483	SOT	LM5009AMMX/NOPB	VSSOP
LM2734YMK/NOPB	SOT	LM5009MM	VSSOP
LM2734YMKX/J7001484	SOT	LM5009MM/J7002196	VSSOP
LM2734YMKX/NOPB	SOT	LM5009MM/NOPB	VSSOP
LM2734YMKX/S5001203	SOT	LM5009MMX/J7002197	VSSOP
LM2734YMKX/S7001963	SOT	LM5009MMX/NOPB	VSSOP
LM2734ZMK/NOPB	SOT	LM5020MM-1	VSSOP
LM2734ZMKX/NOPB	SOT	LM5020MM-1/NOPB	VSSOP
LM2735XMF/NOPB	SOT	LM5020MM-2/NOPB	VSSOP
LM2735XMF/NOPB	SOT	LM5020MMX-1/NOPB	VSSOP
LM2735YMF/NOPB	SOT	LM5020MMX-1/S1	VSSOP
LM2735YMF/NOPB	SOT	LM5020MMX-2/NOPB	VSSOP
LM2736XMK	SOT	LM5030MM	VSSOP
LM2736XMK/NOPB	SOT	LM5030MM/NOPB	VSSOP
LM2736XMKX/NOPB	SOT	LM5030MMX/NOPB	VSSOP
LM2736YMK	SOT	LM5033MM/NOPB	VSSOP
LM2736YMK/J7003058	SOT	LM5033MMX/NOPB	VSSOP
LM2736YMK/NOPB	SOT	LM5068MM-2/NOPB	VSSOP
LM2736YMKX/NOPB	SOT	LM5068MM-4/NOPB	VSSOP
LM2830XMF	SOT	LM5068MMX-2/NOPB	VSSOP
LM2830XMF/J7002053	SOT	LMR10510XMF/NOPB	SOT
LM2830XMF/NOPB	SOT	LMR10510XMFE/NOPB	SOT
LM2830XMF/J7002054	SOT	LMR10510XMF/NOPB	SOT
LM2830XMF/NOPB	SOT	LMR10510YMF/NOPB	SOT
LM2830ZMF/NOPB	SOT	LMR10510YMFE/NOPB	SOT

LM2830ZMFX/NOPB	SOT	LMR10510YMFX/NOPB	SOT
LM2831XMF/NOPB	SOT	LMR10515XMF/NOPB	SOT
LM2831XMFX/NOPB	SOT	LMR10515XMFE/NOPB	SOT
LM2831YMF/J7001590	SOT	LMR10515XMFX/NOPB	SOT
LM2831YMF/NOPB	SOT	LMR10515YMF/NOPB	SOT
LM2831YMF/J7001589	SOT	LMR10515YMFE/NOPB	SOT
LM2831YMF/NOPB	SOT	LMR10515YMFX/NOPB	SOT
LM2831ZMF/NOPB	SOT	LMR12007XMK	SOT
LM3402HVMM/NOPB	VSSOP	LMR12007XMKX	SOT
LM3402HVMMX/NOPB	VSSOP	LMR12007YMK	SOT
LM3405AXMK/NOPB	SOT	LMR12007YMKX	SOT
LM3405AXMKE/NOPB	SOT	LMR12010XMK/NOPB	SOT
LM3405AXMKX/NOPB	SOT	LMR12010XMKE/NOPB	SOT
LM3405XMK/NOPB	SOT	LMR12010XMKX/NOPB	SOT
LM3405XMKX/NOPB	SOT	LMR12010YMK/NOPB	SOT
LM3410XMF/NOPB	SOT	LMR12010YMKX/NOPB	SOT
LM3410XMFE/NOPB	SOT	LMR62421XMF/NOPB	SOT
LM3410XMFX/NOPB	SOT	LMR62421XMFE/NOPB	SOT
LM3410YMF/NOPB	SOT	LMR62421XMFX/NOPB	SOT
LM3410YMFE/NOPB	SOT	SM72485MM/NOPB	VSSOP
LM3410YMF/NOPB	SOT	SM72485MME/NOPB	VSSOP
LM3481MM/NOPB	VSSOP	SM72485MMX/NOPB	VSSOP
LM3481MMX/NOPB	VSSOP	TPS92560DGQ/NOPB	VSSOP
LM3486MM/NOPB	VSSOP	TPS92560DGQR/NOPB	VSSOP
LM3486MMX/NOPB	VSSOP		
LM34922MY/NOPB	VSSOP		

Group 2 Device:

CD74AC540M96

Qualification Report

Qualify 1.3 mil PCC wire on ABCD150 Si Tech in VSSOP packages (DGK & DGS) at TI Melaka for devices with > 75 Operating Voltage
Approved 10/13/2016

Product Attributes

Attributes	Qual Device: LM5020MMX1NOPB
Assembly Site	TIEM-AT
Package Family	VSSOP
Flammability Rating	UL 94 V-0
Wafer Fab Site	GFAB
Wafer Fab Process	ABCD150XV1

- QBS: Qual By Similarity
- Qual Device LM5020MMX1NOPB is qualified at LEVEL1-260CG

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: LM5020MMX1NOPB
THB	Biased Temperature and Humidity, 85C/85%RH	1000HRS	2/154/0
AC	Autoclave 121C	96HRS	3/231/0
WBS	Ball Bond Shear	76 Balls/ lots	3/228/0
WBP	Wire Bond Pull	Wire	3/228/0
TC	Temperature Cycle, -65/150C	500 CYC	3/231/0
HTSL	High Temp Storage Bake 170C	420HRS	3/231/0
WBP	Bond Pull	Post 500 Temp CYC	1/5/0
SAM	SAM	Before and After Pre Con	3/66/0
SAM	SAM	Post Temp 500 Temp Cycle	4/88/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass
BPC	Bond Pad Cratering Check	Post 500 Temp Cycle	1/30/0

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Qualification Report

Qualification of 1.3 mil PCC wire as alternative bonding material for 5/6p SOT23 DBV package-PVIP050 PRTECH assembled at TIEM

Approve Date 30-Nov-2016

Product Attributes



Attributes	Qual Device: LM2736YMKXNOPB	Qual Device: LM2830XMF/NOPB
Assembly Site	TIEM	TIEM-AT
Package Family	FRAME;SOT23;6L;1.753X0.965;AG;MAT;ETCH	FRAME;SOT23;5L;1.372X1.141;AG;MAT;STAMP
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MFAB	MFAB
Wafer Process	PVIP050	PVIP050

- QBS: Qual By Similarity
- Qual Device LM2830XMF/NOPB is qualified at LEVEL1-260CG
- Qual Device LM2736YMKXNOPB is qualified at LEVEL1-260CG

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: LM2736YMKXNOPB	Qual Device: LM2830XMF/NOPB
AC	Autoclave 121C	96HRS	1/77/0	1/77/0
TC	Temperature Cycle, -65/150C	500CYC	1/77/0	1/77/0
HTSL	High Temp Storage Bake 170C	1000HRS	1/77/0	1/77/0
WBP	Bond Pull	Wire	1/76/0	1/76/0
WBP	Bond Pull-Post 500 Temp Cycle	Post TMCL 500CYC	1/30/0	1/30/0
BPC	Bond pad cratering	Post TMCL 500CYC	1/15/0	1/15/0
SAM	SAM	Post TMCL 500 CYC	1/10/0	1/10/0
VM	Visual Quality Reliability	TMCL 500CYC	1/2/0	1/2/0
MQ	Manufacturability (Assembly)		Pass	Pass

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47: -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Qualification Report

1.3 mils PCC wire qualification on ABCD5 PRTECH in VSSOP package at TIEM

Approved 10/31/2016

Product Attributes

	Qual Device: TPS92560DGQR/NOPB	Qual Device: LM34923MM/NOPB
Assembly Site	TIEM	TIEM
Package Family	VSOP	VSSOP
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Site	MFAB	MFAB
Wafer Fab Process	ABCD5	ABCD05

- QBS: Qual by Similarity

- Qual Devices qualified at LEVEL3-260CG: TPS92560DGQR/NOPB, LM34923MM/NOPB

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: TPS92560DGQR/NOPB	Qual Device: LM34923MM/NOPB
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0
WBP	Bond Pull	Wire	3/228/0	3/228/0
WBP	Post Temp. Cycle Bond Pull	Wires	2/60/0	1/30/0
BPC	Bond pad cratering	Post TMCL 500 Cycles	2/4/0	2/10/0
SAM	SAM	Before and After PreCon	3/66/0	3/65/0
SAM	SAM	Post TMCL 500 Cycles	2/20/0	1/10/0
VM	Visual Quality Reliability	TMCL 500 Cycles	2/4/0	2/4/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours
- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles
Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:
Qualified Pb-Free(SMT) and Green

Qualification Report

Conversion of SOT23 (DBZ) devices from Au wire to Cu wire at NS2

Approve Date 11-Jan-2016

Product Attributes

Attributes	Qual Device: BQ2022ADBZR	Qual Device: REF3112AIDBZR	Qual Device: TPD2E009DBZR
Assembly Site	NS2	NS2	NS2
Package Family	SOP (SOT23) (COL)	SOP (SOT23)	SOP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MH8	TMSC FAB2B	FFAB
Wafer Process	LBC7	0.6UM TSMC	ASLC10_BOPO

- QBS: Qual By Similarity

- Qual Devices qualified at LEVEL1-260CG: BQ2022ADBZR, REF1112AIDBZR, REF3112AIDBZR

- Qual Device TPD2E009DBZR is qualified at LEVEL 2-260C

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: BQ2022ADBZR	Qual Device: REF3112AIDBZR	Qual Device: TPD2E009DBZR
PC	Preconditioning	Level 1-260C	6/924/0	3/693/0	3/693/0
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47 : -65C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Qualification Report

Universal BOM Mold 4211880 and Die Attach 4147858 for SOIC DW Packages in TITL and MLA

Approve Date 12-May-2016

Product Attributes

Attributes	Qual Device: ADS1213U	Qual Device: ADS820U	Qual Device: ADS8504IBDW	Qual Device: MSP430F123IDWR	Qual Device: SN65LBC170DW
Assembly Site	TAI	TAI	TAI	TAI	MLA
Package Family	SOIC	SOIC	SOIC	SOIC	SOIC
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	OKI	TSMC WF2	DMOS5	TSMC	DFAB
Wafer Fab Process	OKIDALSATFAB_BICMOS	0.60UM-TSMC	50HPA07	0.35UM-TSMC	LBC3S

- Qual Devices qualified at LEVEL2-260C: ADS1213U, ADS8504IBDW, ADS820U

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: ADS1213U	Qual Device: ADS820U	Qual Device: ADS8504IBDW	Qual Device: MSP430F123IDWR	Qual Device: SN65LBC170DW
AC	Autoclave 121C	96 Hours	1/77/0	-	1/77/0	1/77/0	1/77/0
ED	Electrical Characterization, side by side	Per datasheet parameters	Pass	Pass	Pass	-	Pass
HAST	Biased HAST, 130C/85%RH	192 Hours	-	-	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	1/77/0	-	1/77/0	1/77/0	1/77/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass	Pass
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	3/231/0	1/77/0	1/77/0	1/77/0

Product Attributes

Attributes	Qual Device: SN65LBC170DW_SSTN	Qual Device: SN74LVC541ADW	Qual Device: SN74LVC541ADW_SSTN	QBS Package Reference: TL494IDR	QBS Package Reference: ULQ2003AQDRQ1
Assembly Site	MLA	MLA	MLA	FMX	FMX
Package Family	SOIC	SOIC	SOIC	SOIC	SOIC
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V0	UL 94 V-0
Wafer Fab Supplier	DFAB	FFAB	FFAB	SFAB	SFAB
Wafer Fab Process	LBC3S	ASLC10	ASLC10	J11	J11-SLM

- QBS: Qual By Similarity

- Qual Devices qualified at LEVEL1-260C: SN65LBC170DW, SN74LVC541ADW, MSP430F123IDWR, TL494IDR, ULQ2003AQDRQ1

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed



Type	Test Name / Condition	Duration	Qual Device: SN65LBC170DW_ SSTN	Qual Device: SN74LVC541ADW	Qual Device: SN74LVC541ADW_ SSTN	QBS Package Reference: TL494IDR	QBS Package Reference: ULQ2003AQDRQ1_STD LF
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0	-	3/231/0
ED	Electrical Characterization, side by side	Per datasheet parameters	Pass	Pass	Pass	-	-
HAST	Biased HAST, 130C/85%RH	192 Hours	-	-	-	3/231/0	3/217/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	3/231/0	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0	3/231/0	-	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0	-	3/231/0

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JEDEC47: -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Change Number: C1406045, C1406067

TI Qualification ID: 20140627-106067, 20141019-109101(QBS), 20140520-104903(QBS)

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