

PCN Number:	20180727000.1	PCN Date:	Aug 7 2018
Title:	Qualification of a new die prep site (Clark), die coat addition, datasheet changes, and enhanced substrate for the devices in Group 1 and die coat addition only for the devices in Group 2		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Nov 7 2018	Estimated Sample Availability:	Provided upon Request
Change Type:	<input type="checkbox"/> Assembly Site <input type="checkbox"/> Assembly Process <input type="checkbox"/> Assembly Materials <input type="checkbox"/> Design <input type="checkbox"/> Electrical Specification <input checked="" type="checkbox"/> Mechanical Specification <input type="checkbox"/> Test Site <input type="checkbox"/> Packing/Shipping/Labeling <input type="checkbox"/> Test Process <input type="checkbox"/> Wafer Bump Site <input checked="" 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 Process <input type="checkbox"/> Part number change		

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of a new substrate AT site (Clark), die coat addition, datasheet changes, and new substrate for the devices in Group 1 and die coat addition only for the devices in Group 2 as follows:

Group 1 Devices:

What	Current	Proposed
Die Coat	None	PI
Die Prep Site	TIEM	TI Clark
Substrate	SIL0008A	SIL0008G
Bottom Drawing		

The product datasheet(s) are being updated as summarized below. The following change history provides further details.



LMZ10501

SNVS677G –MAY 2011–REVISED JULY 2018

www.ti.com

Changes from Revision F (November 2014) to Revision G

Page

• Editorial rebranding for SEO.....	1
• Added links for Webench and top navigator icon for TI reference design	1
• Move storage temperature spec to <i>Abs Max</i> table	4
• Changed "Handling" to "ESD" Ratings	4
• Added <i>Device Support</i>	24
• Changed SIL package drawing to SIL0008G	25

LMZ10500

SNVS723G – OCTOBER 2011 – REVISED JULY 2018

www.ti.com
Changes from Revision F (February 2015) to Revision G
Page

• editorial rebranding for SEO	1
• Added links for Webench	1
• Move storage temperature spec to <i>Abs Max</i> table	4
• Changed "Handling" to "ESD" Ratings	4
• Added Device Support	23
• Changed SIL package drawing to SIL0008G	24

The datasheet number will be changing:

Device Family	Change From:	Change To:
LMZ10501	SNVS677F	SNVS677G
LMZ10500	SNVS723F	SNVS723G

These changes may be reviewed at the datasheet links provided below:

<http://www.ti.com/lit/ds/symlink/lmz10501.pdf>
<http://www.ti.com/lit/ds/symlink/lmz10500.pdf>
Group 2 Devices:

What	Current	Proposed
Die Coat	None	PI

Reason for Change:

Continuity of Supply

Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

None

Anticipated impact on Material Declaration

<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	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 .
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Changes to product identification resulting from this PCN:

Not applicable

Product Affected
Group 1 Device List

LMZ10500SILR	LMZ10500SILT	LMZ10501SILR	LMZ10501SILT
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Group 2 Device List

LMZ20501SILR	LMZ20501SILT	LMZ20502SILR	LMZ20502SILT
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Qualification Report

**LMZ10500/1SIL Substrate change, PI die coat added. LMZ20502/1SIL PI die coat added.
Approve Date 29-May-2018**

Product Attributes

Attributes	Qual Device: <u>LMZ10501SILT ; New substrate</u>	QBS Product Reference: <u>LMZ10501SIL ; Original qualification</u>
Assembly Site	PTI-TAIWAN	PTI-TAIWAN
Package Family	MicroSIP	MicroSIP
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MFAB	MFAB

- QBS: Qual By Similarity
- Qual Device LMZ10501SILT is qualified at LEVEL3-260CX

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: <u>LMZ10501SILT ; New substrate</u>	QBS Product Reference: <u>LMZ10501SIL ; Original qualification</u>
HAST	Biased HAST, 110C/85%RH	264 Hours	3/231/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0
HBM	ESD - HBM	1000 V	-	1/3/0
CDM	ESD - CDM	250 V	-	1/3/0
HTOL	Life Test, 125C	1000 Hours	-	1/77/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	1/77/0
LU	Latch-up	(per JESD78)	-	1/6/0
TC	Temperature Cycle, -40/125C	850 Cycles	3/231/0	3/231/0
UHAST	Unbiased HAST, 110C/85%RH	264 Hours	3/231/0	-
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	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: -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

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

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