

12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20180727000.1

Qualification of a new die prep site (Clark), die coat addition, datasheet changes, and enhanced substrate for Group 1 devices and die coat addition only for the Group 2 devices

Change Notification / Sample Request

Date: August 07, 2018

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 changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

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 www admin team@list.ti.com).

Sincerely,

PCN Team SC Business Services

20180727000 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
LMZ10501SILR	null
LMZ10501SILT	null
LMZ20501SILT	null
LMZ10500SILT	null
LMZ20502SILR	null
LMZ20502SILT	null

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

PCN Number: 20180727000.1 **PCN Date:** Aug 7 2018 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 Title: in Group 2 Customer **PCN** Manager Dept: **Quality Services** Contact: Proposed 1st Ship Provided upon Nov 7 2018 **Estimated Sample Availability:** Date: Request **Change Type: Assembly Site Assembly Process Assembly Materials** Design **Electrical Specification** Mechanical Specification Test Site Packing/Shipping/Labeling **Test Process** Wafer Bump Site Wafer Bump Material Wafer Bump Process Wafer Fab Site Wafer Fab Materials Wafer Fab Process 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	8X 0.6±0.1 	8X 0.7 8X 0.7 4X (0.15) 3X (0.65) 4X (0.15) 4X (0.15)

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



LMZ10501

SNVS677G –MAY 2011–REVISED JULY 2018		
CI	hanges 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 Abs Max table	4
•	Changed "Handling" to "ESD" Ratings	4
•	Added Device Support	24
•	Changed SIL package drawing to SIL0008G	25



LMZ10500

SNVS723G – OCTOBER 2011 – REVISED JULY 2018 www.ti.co		
Changes from Revision F (February 201	5) to Revision G Page	
editorial rebranding for SEO	1	
Added links for Webench	1	
Move storage temperature spec to Abs	Max table	
Changed "Handling" to "ESD" Ratings	4	
Added Device Support		
Changed SIL package drawing to SIL00	008G	

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

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.
0.10110.00110.1	Upon production release the revised reports can be obtained from

Changes to product identification resulting from this PCN:

Not applicable

Group 1 Device List LMZ10500SILR LM	MZ10500SILT	LMZ10501SILR	LMZ10501SILT
LMZ10500SILR LM	MZ10500SILT	LMZ10501SILR	LMZ10501SILT
			2210001012.
Group 2 Device List			
	MZ20501SILT	LMZ20502SILR	LMZ20502SILT



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</u> ; <u>New substrate</u>	QBS Product Reference: LMZ10501SIL: Original qualification	
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

Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: <u>LMZ10501SILT; New</u> <u>substrate</u>	QBS Product Reference: <u>LMZ10501SIL:</u> <u>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

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.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com

⁻ Qual Device LMZ10501SILT is qualified at LEVEL3-260CX

The following are equivalent HTOL options based on an activation energy of 0.7eV: 1250/14 Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

The following are equivalent HTOL options based on an activation energy of 0.7eV: 150C/14 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/14 Hours, and 170C/420 Hours

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