

PCN Number:	20230816000.1		PCN Date:	August 17, 2023								
Title:	Qualification of alternate mount compound material for select devices											
Customer Contact:	Change Management team		Dept:	Quality Services								
Proposed 1st Ship Date:	Nov 14, 2023		Sample Requests accepted until:	Sept 16, 2023*								
*Sample requests received after Sept 16, 2023 will not be supported.												
Change Type:												
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material							
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Process							
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Fab Site							
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Material							
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Process							
PCN Details												
Description of Change:												
This PCN is to inform of an alternate mound compound material set for the list of devices in the product affected sections below.												
<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 33%;">What</th> <th style="width: 33%;">Current</th> <th style="width: 33%;">Additional</th> </tr> </thead> <tbody> <tr> <td>Die attach material</td> <td>4224819/4223872</td> <td>4221460 + 4226215</td> </tr> </tbody> </table>					What	Current	Additional	Die attach material	4224819/4223872	4221460 + 4226215		
What	Current	Additional										
Die attach material	4224819/4223872	4221460 + 4226215										
Reason for Change:												
Standardization												
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):												
None												
Impact on Environmental Ratings												
Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.												
<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 25%;">RoHS</th> <th style="width: 25%;">REACH</th> <th style="width: 25%;">Green Status</th> <th style="width: 25%;">IEC 62474</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> No Change</td> </tr> </tbody> </table>					RoHS	REACH	Green Status	IEC 62474	<input checked="" type="checkbox"/> No Change			
RoHS	REACH	Green Status	IEC 62474									
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change									
Changes to product identification resulting from this PCN:												
None												
Product Affected:												
SN1205066PDQNR	TLV70727PDQNR	TLV70736PDQNT	TLV71729PDQNT									
SN1206013PDQNR	TLV70727PDQNT	TLV717185PDQNR	TLV71733PDQNR									
TLV70712PDQNR	TLV707285DQNR	TLV717185PDQNT	TLV71733PDQNT									
TLV70712PDQNT	TLV707285DQNT	TLV71718PDQNR	TLV74010PDQNR									
TLV70718PDQNT	TLV707285PDQNR	TLV71718PDQNT	TLV74012PDQNR									

TLV70719PDQNR	TLV707285PDQNT	TLV71727PDQNR	TLV74018PDQNR
TLV70719PDQNT	TLV70732DQNR	TLV71727PDQNT	TLV74028PDQNR
TLV70725PDQNR	TLV70732DQNT	TLV71729PDQNR	TLV74033PDQNR
TLV70725PDQNT			

TI Information
Selective Disclosure

Qualification Report

xQFN Offload Into CDAT - DQN (CMOS9T5V)
Approve Date 25-April-2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: LP5907SNX-3.0/NOPB	QBS Reference: TLV70732DQNR	QBS Reference: LP8556TMX-E09/S1
HAST	A2	Biased HAST	110C/85%RH	264 Hours	-	-	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	3/231/0	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	-	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	3/231/0	-	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	3/231/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	3/915/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	-	1/22/0	-
PD	C4	Physical Dimensions	(per mechanical drawing)	-	3/15/0	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-

- QBS: Qual By Similarity|

- Qual Device LP5907SNX-3.0/NOPB is qualified at MSL1 260C
- 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

TI Qualification ID: R-CHG-2111-019

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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