

PCN Number:	20210702002.1A		PCN Date:	August 03, 2021						
Title:	Qualification of new BOM for select package Devices									
Customer Contact:	PCN Manager	Dept:	Quality Services							
Proposed 1st Ship Date:	Oct 02, 2021	Estimated Sample Availability:	Date Provided at Sample request							
Change Type:										
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>						
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>						
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>						
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>						
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>						
				<input type="checkbox"/>						
				Wafer Bump Site						
				Wafer Bump Material						
				Wafer Bump Process						
				Wafer Fab Site						
				Wafer Fab Materials						
				Wafer Fab Process						
PCN Details										
Description of Change:										
<p>Revision A is to announce the <u>addition</u> of new devices that was not included on the original PCN notification. The new devices are highlighted and bolded in the device list below. The expected first shipment date for the new devices will be 90 days from this notice (Nov 03, 2021) for the newly added device only. The proposed 1st ship date of Oct 02, 2021 still applies for the original set of devices.</p> <p>Texas Instruments Incorporated is announcing the qualification of new material set for the devices listed in the "Product Affected" Section.</p> <p>Material Difference:</p> <table border="1"> <thead> <tr> <th></th> <th>Current</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>Lead finish</td> <td>NiPdAu</td> <td>Matte Sn</td> </tr> </tbody> </table> <p>Upon expiration of this PCN, TI will combine lead free solutions in a single <u>standard part number</u>, for example; <u>TAS2110RPPR</u> – can ship with both Matte Sn and NiPdAu. When available customers may specify NiPdAu finish by ordering the part with the G4 suffix, e.g. TAS2110RPPRG4."</p> <p>Example:</p> <ul style="list-style-type: none"> - Customer order for 7500 units of TAS2110RPPR with 2500 units SPQ (Standard Pack Quantity per Reel). - TI can satisfy the above order in one of the following ways. <ul style="list-style-type: none"> I. 3 Reels of NiPdAu finish. II. 3 Reels of Matte Sn finish III. 2 Reels of Matte Sn and 1 reel of NiPdAu finish. IV. 2 Reels of NiPdAu and 1 reel of Matte Sn finish. 						Current	Proposed	Lead finish	NiPdAu	Matte Sn
	Current	Proposed								
Lead finish	NiPdAu	Matte Sn								
Reason for Change:										
Continuity of supply.										
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.

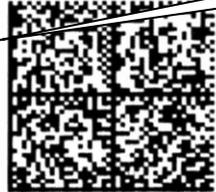
RoHS	REACH	Green Status	IEC 62474
<input checked="" type="checkbox"/> No Change			

Changes to product identification resulting from this PCN:

Sample product shipping label (not actual product label)

G4 = NiPdAu
G3 = Matte Sn


 MADE IN: Malaysia
 2DC: 20:
 MSL 2 /260C/1 YEAR SEAL DT
 MSL 1 /235C/UNLIM 03/29/04
 OPT:
 ITEM: 39
 LBL: 5A (L)T0:1750



(1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY (1T) 7523483SI2
 (P)
 (2P) REV: (V) 0033317
 (20L) CSO: SHE (21L) CCO:USA
 (22L) ASO: MLA (23L) ACO: MYS

Product Affected:

BQ25672RQMR	TPS259470ARPWR	TPS62825DMQR	TPS7A5301RPST
BQ25792RQMR	TPS259472ARPWR	TPS62825DMQT	TPS7A5401RPSR
BQ25798RQMR	TPS259472LRPWR	TPS6282618DMQR	TPS7A5401RPST
LM73100RPWR	TPS259474ARPWR	TPS6282618DMQT	TAS2110RPPR
SN51395P-1RJER	TPS259474LRPWR	TPS62826ADMQR	TAS2110RPPT
SN552882RPMR	TPS51395RJET	TPS62826DMQR	TPS51393PRJER
SN55288RPMR	TPS51486RJET	TPS62826DMQT	TPS51393PRJET
SN611781BRQET	TPS53820RWZT	TPS62827ADMQR	TPS51393RJER
SN611782BRQET	TPS53831RWZT	TPS62865RQYR	TPS51486RJER
SN61288RQQR	TPS543320RPYR	TPS62867RQYR	TPS51487XARJER
SN62825BDMQR	TPS543620NRPYR	TPS628681ARQYR	TPS53820RWZR
SN62825DMQR	TPS543620RPYR	TPS628682ARQYR	TPS53831RWZR
SN62826BDMQR	TPS543820RPYR	TPS628690ARQYR	TPS552882RPMR
SN62826DMQR	TPS543820RPYR-ET	TPS628691ARQYR	TPS51393RJET
SN62827DMQR	TPS566231PRQFR	TPS62901RPJR	TPS51395PRJER
TAS2563RPPR	TPS566231RQFR	TPS62902RPJR	TPS51395PRJET
TAS2563RPPT	TPS566238PRQFR	TPS62903RPJR	TPS51395RJER
TLV62595DMQR	TPS566238RQFR	TPS62912RPUR	TPS51486ARJER
TPS25210ARPWR	TPS62824ADMQR	TPS62913RPUR	TPS55288RPMR
TPS25210LRPWR	TPS6282518DMQR	TPS7A5201RPSR	TPS568330RJER
TPS259460ARPWR	TPS6282518DMQT	TPS7A5201RPST	TPS61288RQQR
TPS259460LRPWR	TPS62825ADMQR	TPS7A5301RPSR	

Qualification Report

Approve Date 22-Jun-2021

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: <u>TPS53831RWZR</u>	Qual Device: <u>TPS543620RPYR</u>	Qual Device: <u>TPS62903RPJR</u>	QBS Package Reference: <u>SN62825DMQR</u>	QBS Package Reference: <u>TPS62085RLTR</u>
AC	Autoclave 121C	96 Hours	3/231/0	-	3/231/0	-	3/231/0
CDM	ESD - CDM	1500V	-	-	-	2/6/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	2/154/0	-	-	3/231/0	3/231/0
HBM	ESD - HBM	3000V	-	-	-	1/3/0	-
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	-	-	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0	3/231/0	3/231/0	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass	Pass
MSL	Thermal Integrity Sequence	Level 2-260C	3/36/0	3/36/0	3/36/0	-	3/36/0
PD	Physical Dimensions	(per mechanical drawing)	3/15/0	3/15/0	3/15/0	-	3/15/0
SD	Solderability	Pb Free	3/66/0	3/66/0	3/66/0	2/44/0	3/66/0
TC	Temperature Cycle, -55/125C	700 Cycles	3/231/0	3/231/0	-	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	3/231/0	3/231/0	-
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	3/231/0	-	3/231/0	-
VM	Visual Quality Reliability Inspection	Post Temp Cycle	3/6/0	3/6/0	3/6/0	-	3/6/0

- QBS: Qual By Similarity

- Qual Device TPS53831RWZR, TPS543620RPYR, TPS62903RPJR are qualified at LEVEL2-260C

- 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

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