

<b>PCN Number:</b>	20211129000.1		<b>PCN Date:</b>	December 28, 2021									
<b>Title:</b>	Qualification of new BOM materials for select devices												
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services										
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Mar. 28 2022	<b>Estimated Sample Availability:</b>	Date provided at sample request										
<b>Change Type:</b>													
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site								
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material								
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process								
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Site								
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Materials								
		<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Process								
<b>PCN Details</b>													
<b>Description of Change:</b>													
This PCN is to inform of the qualification of new BOM options for the devices in the product affected section as follows:													
<table border="1"> <thead> <tr> <th>What</th> <th>Current</th> <th>New</th> </tr> </thead> <tbody> <tr> <td><b>Mold Compound</b></td> <td><b>4222790</b></td> <td><b>4223495</b></td> </tr> <tr> <td><b>Leadframe Finish</b></td> <td><b>NiPdAu</b></td> <td><b>Matte Sn</b></td> </tr> </tbody> </table>					What	Current	New	<b>Mold Compound</b>	<b>4222790</b>	<b>4223495</b>	<b>Leadframe Finish</b>	<b>NiPdAu</b>	<b>Matte Sn</b>
What	Current	New											
<b>Mold Compound</b>	<b>4222790</b>	<b>4223495</b>											
<b>Leadframe Finish</b>	<b>NiPdAu</b>	<b>Matte Sn</b>											
Upon expiration of this PCN, TI will combine lead free solutions in a single <b><i>standard part number</i></b> , for example; <b><i>TPS54824RNVR</i></b> – can ship with both Matte Sn and NiPdAu.													
<b>Reason for Change:</b>													
Continuity of supply													
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>													
None													
<b>Impact on Environmental Ratings</b>													
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"> <thead> <tr> <th>RoHS</th> <th>REACH</th> <th>Green Status</th> <th>IEC 62474</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> <td><input checked="" type="checkbox"/> No Change</td> </tr> </tbody> </table>					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	
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										
<b>Changes to product identification resulting from this PCN:</b>													
None													
<b>Product Affected:</b>													
DC56C231RNNR	SN61838SZRNSR	TPS51487XRJET	TPS62148RGXT										
PTAS2772A1RJQR	SN61838SZRNST	TPS51488RJER	TPS62480RNCR										
PTAS2772A1RJQT	SN62825DMQR	TPS54424RNVR	TPS62480RNCT										
PTAS2772B0RJQR	SN62826DMQR	TPS54424RNVT	TPS62822DLCR										
PTAS2772B0RJQT	SNP002774RJQR	TPS54824RNVR	TPS62822DLCT										

PTAS2772RJQR	SNP002774RJQT	TPS54824RNVT	TPS62823DLCR
PTAS2772RJQT	TAS2770RJQR	TPS548A28RWWR	TPS62823DLCT
PTAS2774RJQR	TAS2770RJQT	TPS548A29RWWR	TPS6282518DMQR
PTAS2774RJQT	TAS2772A1RJQR	TPS548B28RWWR	TPS62825DMQR
PTPS22993PRLWR	TAS2772A1RJQT	TPS548B29RWWR	TPS62825DMQT
PTPS22993PRLWT	TAS2772AB0RJQR-S	TPS54JA20RWWR	TPS62826DMQR
PTPS22993RLWR	TAS2772AB0RJQT-S	TPS54JB00RWWR	TPS62826DMQT
PTPS22993RLWT	TAS2772BB0RJQR-S	TPS54JB20RWWR	TPS62840DLCR
PTPS548A28RWWT	TAS2772BB0RJQT-S	TPS568215OARNNR	TPS62841DLCR
PTPS548A29RWWT	TAS2774RJQR	TPS568215OARNNT	TPS62849DLCR
PTPS548B28RWWR	TAS2774RJQT	TPS568215RNNR	TPS630250PRNCR
PTPS548B28RWWT	TPS2121RUXR	TPS568215RNNT	TPS630250PRNCT
PTPS548B29RWWR	TPS2121RUXT	TPS568230RJER	TPS630250RNCR
PTPS548B29RWWT	TPS22993RLWR	TPS568230RJET	TPS630250RNCT
PTPS54JA20RWWT	TPS51393PRJER	TPS568330RJER	TPS63050RMWR
PTPS54JA40RWWR	TPS51393PRJET	TPS568330RJET	TPS63050RMWT
PTPS54JA40RWWT	TPS51393RJER	TPS56C215RNNR	TPS63051RMWR
PTPS54JB00RWWR	TPS51393RJET	TPS56C215RNNT	TPS63051RMWT
PTPS54JB00RWWT	TPS51395PRJER	TPS56C230RJER	TPS630701RNMR
PTPS54JB20RWWR	TPS51395PRJET	TPS56C231RNNR	TPS630701RNMT
PTPS54JBD1RWWR	TPS51395RJER	TPS61022RWUR	TPS630702RNMR
PTPS54JBDCRWWR	TPS51395RJET	TPS61022RWUT	TPS630702RNMT
PX54JBRSRWWR	TPS51396ARJER	TPS61089RNR	TPS63070RNMR
SN1904038RNWR	TPS51396ARJET	TPS61089RNRT	TPS63070RNMT
SN1904038RNWT	TPS51396RJER	TPS61235PRWLR	TPS63802DLAR
SN1905071RNRR	TPS51396RJET	TPS61235PRWLT	TPS63802DLAT
SN1905071RNRT	TPS51397ARJER	TPS61236PRWLR	TPS65295RJER
SN2004053RWUR	TPS51397RJER	TPS61236PRWLT	TPS65295RJET
SN51395P-1RJER	TPS51486ARJER	TPS621361RGXR	TPS65296RJER
SN51395RJER	TPS51486RJER	TPS621361RGXT	TPSDC63802DLAR
SN566230RJER	TPS51486RJET	TPS62136RGXR	XPS63802DLAR
SN566230RJET	TPS51487XARJER	TPS62136RGXT	XTPS51488RJER
SN61089RNR	TPS51487XRJER	TPS62148RGXR	XTPS56C231RNNR
SN61089RNRT			

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: SN62825DMQR	Qual Device: TPS62821DLCR	Qual Device: TPS62841DLCR
TC	Temperature Cycle, 55C/+125C	700 Cycles	3/231/0	3/231/0	3/231/0
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
SD	Solderability	Pb Free	3/66/0	3/66/0	-

- QBS: Qual By Similarity

- Qual Device SN62825DMQR is qualified at LEVEL1-260CG

- Qual Device TPS62841DLCR is qualified at LEVEL1-260CG

- Qual Device TPS62821DLCR is qualified at LEVEL1-260CG

- 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 H

- 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: 20210406-139470

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS56C215RNNR	QBS Package Reference: TPS62085RLTR
AC	Autoclave	121C, 96 Hours	3/231/0	3/231/0
HAST	Biased HAST	130C/85% RH, 96 Hours	-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	3/231/0	3/231/0
PD	Physical Dimensions	(per mechanical drawing)	3/15/0	3/15/0
SD	Solderability	Pb Free	3/66/0	3/66/0
TC	Temperature Cycle, -55C/+125C	700 Cycles	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: -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: 20210224-138809

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

Type	Test Name / Condition	Duration	Qual Device: TPS548A28RWWR	Qual Device: TPS568230RJER
TC	Temperature Cycle, 55C/+125C	700 Cycles	3/231/0	3/231/0
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass
SD	Solderability	Pb Free	3/66/0	3/66/0

- QBS: Qual By Similarity
  - Qual Device TPS568230RJER is qualified at LEVEL2-260CG
  - Qual Device TPS548A28RWWR is qualified at LEVEL2-260CG
  - 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: 20210408-139538

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

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Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
WW PCN Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>

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