



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20211129000.1
Qualification of a new BOM materials for select devices

Change Notification / Sample Request

Date: December 28, 2021
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.

Texas Instruments requires acknowledgement of 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 additional data is required, requests must be received within **30 days** of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date on Page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

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 or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the PCN Team (PCN_admin_team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team
SC Business Services

20211129000.1
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
TPS568230RJER	null
TPS56C215RNNR	null
TPS2121RUXT	null
TPS54824RNV	null
TPS56C215RNNT	null
TPS62136RGXT	null
TPS62480RNCT	null
TPS63070RNMR	null
TPS568230RJET	null
TPS62148RGXT	null
TPS630701RNMT	null
TPS568215RNNR	null
TPS62136RGXR	null
TPS568215RNNT	null
TPS61089RNRR	null
TPS62825DMQR	null
TPS2121RUXR	null
TPS61022RWUR	null
TPS61022RWUT	null
TPS630250RNCR	null
TPS63070RNMT	null
TPS63802DLAR	null
TPS51486ARJER	null
TPS51486RJER	null
TPS56C230RJER	null
TPS65295RJER	null
TPS65295RJET	null
TPS62825DMQT	null
TPS63050RMWR	null
TPS63051RMWR	null
TPS548A28RWWR	null
TPS621361RGXR	null
TPS621361RGXT	null
TPS6282518DMQR	null
TPS63050RMWT	null
TPS630250RNCT	null
TPS51487XRJER	null
TPS51397ARJER	null
TPS61236PRWLR	null
TPS62480RNCR	null
TPS62148RGXR	null
TPS61089RNRT	null
TPS62823DLCR	null
TPS630702RNMR	null
TPS630702RNMT	null
TPS62823DLCT	null
TPS630701RNMR	null
SN51395P-1RJER	null
TPS51393PRJER	null
TPS51393PRJET	null
TPS51395PRJER	null
TPS51486RJET	null
TPS51488RJER	null
TPS54424RNVR	null
SN1904038RNWR	null

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

PCN Number:	20211129000.1			PCN Date:	December 28, 2021									
Title:	Qualification of new BOM materials for select devices													
Customer Contact:	PCN Manager	Dept:	Quality Services											
Proposed 1st Ship Date:	Mar. 28 2022		Estimated Sample Availability:	Date provided at sample request										
Change Type:														
☐	Assembly Site	☐	Design	☐	Wafer Bump Site									
☐	Assembly Process	☐	Data Sheet	☐	Wafer Bump Material									
☒	Assembly Materials	☐	Part number change	☐	Wafer Bump Process									
☐	Mechanical Specification	☐	Test Site	☐	Wafer Fab Site									
☐	Packing/Shipping/Labeling	☐	Test Process	☐	Wafer Fab Materials									
		☐		☐	Wafer Fab Process									
PCN Details														
Description of Change:														
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>Mold Compound</td> <td>4222790</td> <td>4223495</td> </tr> <tr> <td>Leadframe Finish</td> <td>NiPdAu</td> <td>Matte Sn</td> </tr> </tbody> </table>						What	Current	New	Mold Compound	4222790	4223495	Leadframe Finish	NiPdAu	Matte Sn
What	Current	New												
Mold Compound	4222790	4223495												
Leadframe Finish	NiPdAu	Matte Sn												
Upon expiration of this PCN, TI will combine lead free solutions in a single standard part number , for example; TPS54824RNVR – can ship with both Matte Sn and NiPdAu.														
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										
☒ No Change		☒ No Change		☒ No Change										
Changes to product identification resulting from this PCN:														
None														
Product Affected:														
DC56C231RNNR	SN61838SZRNSR	TPS51487XRJET	TPS62148RGXT											
PTAS2772A1RJQR	SN61838SZRNST	TPS51488RJER	TPS62480RNCR											
PTAS2772A1RJQT	SN62825DMQR	TPS54424RNVR	TPS62480RNCT											
PTAS2772B0RJQR	SN62826DMQR	TPS54424RNVN	TPS62822DLCT											
PTAS2772B0RJQT	SNP002774RJQR	TPS54824RNVR	TPS62822DLCT											

PTAS2772RJQR	SNP002774RJQT	TPS54824RNV	TPS62823DL
PTAS2772RJQT	TAS2770RJQR	TPS548A28RWW	TPS62823DL
PTAS2774RJQR	TAS2770RJQT	TPS548A29RWW	TPS6282518DMQR
PTAS2774RJQT	TAS2772A1RJQR	TPS548B28RWW	TPS62825DMQR
PTPS22993PRLWR	TAS2772A1RJQT	TPS548B29RWW	TPS62825DMQT
PTPS22993PRLWT	TAS2772AB0RJQR-S	TPS54JA20RWW	TPS62826DMQR
PTPS22993RLWR	TAS2772AB0RJQT-S	TPS54JB00RWW	TPS62826DMQT
PTPS22993RLWT	TAS2772BB0RJQR-S	TPS54JB20RWW	TPS62840DL
PTPS548A28RWW	TAS2772BB0RJQT-S	TPS568215OARNNR	TPS62841DL
PTPS548A29RWW	TAS2774RJQR	TPS568215OARNNT	TPS62849DL
PTPS548B28RWW	TAS2774RJQT	TPS568215RNNR	TPS630250PRNCR
PTPS548B28RWW	TPS2121RUXR	TPS568215RNN	TPS630250PRNCT
PTPS548B29RWW	TPS2121RUXT	TPS568230RJER	TPS630250RNCR
PTPS548B29RWW	TPS22993RLWR	TPS568230RJET	TPS630250RNCT
PTPS54JA20RWW	TPS51393PRJER	TPS568330RJER	TPS63050RMWR
PTPS54JA40RWW	TPS51393PRJET	TPS568330RJET	TPS63050RMWT
PTPS54JA40RWW	TPS51393RJER	TPS56C215RNNR	TPS63051RMWR
PTPS54JB00RWW	TPS51393RJET	TPS56C215RNN	TPS63051RMWT
PTPS54JB00RWW	TPS51395PRJER	TPS56C230RJER	TPS630701RNMR
PTPS54JB20RWW	TPS51395PRJET	TPS56C231RNNR	TPS630701RNMT
PTPS54JBD1RWW	TPS51395RJER	TPS61022RWUR	TPS630702RNMR
PTPS54JBDCRWW	TPS51395RJET	TPS61022RWUT	TPS630702RNMT
PX54JBRSRWW	TPS51396ARJER	TPS61089RNR	TPS63070RNMR
SN1904038RNWR	TPS51396ARJET	TPS61089RNRT	TPS63070RNMT
SN1904038RNWT	TPS51396RJER	TPS61235PRWLR	TPS63802DLAR
SN1905071RNR	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.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
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Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN_ww_admin_team@list.ti.com

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