

<b>PCN Number:</b>	20220624001.1		<b>PCN Date:</b>	June 28, 2022												
<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>	Sept 28, 2022	<b>Sample requests accepted until:</b>	July 28, 2022*													
*Sample requests received after (July 28, 2022) will not be supported.																
<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"/>	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>Mold Compound</td> <td>4222790</td> <td>4223495</td> </tr> <tr> <td>Leadframe Finish</td> <td>NiPdAu</td> <td>Matte Sn</td> </tr> <tr> <td>ECAT</td> <td>G4</td> <td>G3</td> </tr> </tbody> </table>					What	Current	New	Mold Compound	4222790	4223495	Leadframe Finish	NiPdAu	Matte Sn	ECAT	G4	G3
What	Current	New														
Mold Compound	4222790	4223495														
Leadframe Finish	NiPdAu	Matte Sn														
ECAT	G4	G3														
Upon expiration of this PCN, TI will combine lead free solutions in a single <b><u>standard part number</u></b> , for example; <b><u>SN2001042RWUR</u></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>																
Sample product shipping label (not actual product label)																
<div style="border: 1px solid black; border-radius: 15px; padding: 5px; display: inline-block;"> <b>G3 = Matte Sn</b>  <b>G4 = NiPdAu</b> </div>																

TEXAS INSTRUMENTS  
MADE IN: Malaysia  
2DC: 20:



(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

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

**Product Affected:**

BQ25620RYKR	TPS22998RYZR	TPS61178RNWR	TPS62147RGXT
SN2001042RWUR	TPS51371RJNR	TPS61178RNWT	TPS62824ADMQR
SN51371RJNR	TPS51371RJNT	TPS61230ARNSR	TPS6282533DMQR
SN611781ARNWR	TPS51372RJNR	TPS61230ARNST	TPS62825ADMQR
SN611781RNWR	TPS548B27RYLR	TPS62086RLTR	TPS6282618DMQR
SN61230ARNSR	TPS54A20RNJR	TPS62086RLTT	TPS62826ADMQR
SN621371RGXR	TPS54A20RNJT	TPS62087RLTR	TPS62827ADMQR
SN62825CDMQR	TPS54J060RPGR	TPS62087RLTT	TPS62827DMQR
SN62826CDMQR	TPS54J061RPGR	TPS6209718RWKR	TPS62827DMQT
SN62827CDMQR	TPS566231RQFR	TPS6209718RWKT	TPS628691ARQYR
SN62827DMQR	TPS566235RJNR	TPS6209733RWKR	TPSM82480MOPR
TAS2563RPPR	TPS566235RJNT	TPS6209733RWKT	TPSM82480MOPT
TAS2772AB0RJQR	TPS566335RJNR	TPS62097RWKR	TPSM84424MOLR
TAS2772B0RJQR	TPS566335RJNT	TPS62097RWKT	TPSM84624MOLR
TAS2772B0RJQT	TPS56637RPAR	TPS621351RGXR	TPSM84824MOLR
TAS2772BB0RJQR	TPS568215OARNNR	TPS621351RGXT	TPSM84A21MOJR
TAS2780RYAR	TPS568215OARNNT	TPS62135RGXR	TPSM84A21MOJT
TPS22992RXPR	TPS611781RNWR	TPS62135RGXT	TPSM84A22MOJR
TPS22992SRXNR	TPS611781RNWT	TPS62147RGXR	TPSM84A22MOJT

**Qualification Report**

Approve Date 06-Aug-2020

**Qualification Results**

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

Type	Test Name / Condition	Duration	Qual Device: TPS62085RLTR
AC	Autoclave	121C, 96 Hours	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
MQ	Manufacturability	Per Mfg Site	3/Pass
MSL	Moisture Sensitivity	Level 1-260C	3/36/0
PD	Physical Dimensions	(per mechanical drawing)	3/15/0
SD	Solderability	Pb Free	3/66/0
TC	Temperature Cycle	-55C/+125C, 700 Cycles	3/231/0
VM	Visual Quality Reliability Inspection	Post Temp Cycle	3/6/0

- QBS: Qual By Similarity

- Qual Device TPS62085RLTR is qualified at LEVEL1-260C

- 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

## Qualification Report

Approve Date 06-Aug-2020

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: <u>TPS62085RLTR</u>
AC	Autoclave	121C, 96 Hours	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
MQ	Manufacturability	Per Mfg Site	3/Pass
MSL	Moisture Sensitivity	Level 1-260C	3/36/0
PD	Physical Dimensions	(per mechanical drawing)	3/15/0
SD	Solderability	Pb Free	3/66/0
TC	Temperature Cycle	-55C/+125C, 700 Cycles	3/231/0
VM	Visual Quality Reliability Inspection	Post Temp Cycle	3/6/0

- QBS: Qual By Similarity

- Qual Device TPS62085RLTR is qualified at LEVEL1-260C

- 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

## Qualification Report

Approve Date 22-Apr-2021

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: <u>TLV62585RWTR</u>
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Type	Test Name / Condition	Duration	Qual Device: <u>TLV62585RWTR</u>
TC	Temperature Cycle, 55C/+125C	700 Cycles	3/231/0
AC	Autoclave 121C	96 Hours	3/231/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	3/Pass
SD	Solderability	Pb Free	3/66/0

- QBS: Qual By Similarity

- Qual Device TLV62585RWTR 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 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

## Qualification Report

Approve Date 21-Oct-2021

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: <u>SN62825DMQR</u>	Qual Device: <u>TPS62821DLCR</u>	Qual Device: <u>TPS62841DLCR</u>
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 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

# Qualification Report

Approve Date 28-Sept-2021

## Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: <u>TPS548A28RWWR</u>	Qual Device: <u>TPS568230RJER</u>
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

# Qualification Report

Approve Date 04-Oct-2021

## Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: <u>TPS56C215RNNR</u>	QBS Package Reference: <u>TPS62085RLTR</u>
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

- QBS: Qual By Similarity
- Qual Device TPS56C215RNNR 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

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

<b>Location</b>	<b>E-Mail</b>
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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