

<b>PCN Number:</b>	20171117000	<b>PCN Date:</b>	Nov. 30, 2017						
<b>Title:</b>	Qualify New Assembly Material set for Selected Device(s)								
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services						
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Mar. 1, 2018	<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"/>	Assembly Process	<input type="checkbox"/>	Data Sheet						
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change						
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site						
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process						
		<input type="checkbox"/>	Wafer Bump Site						
		<input type="checkbox"/>	Wafer Bump Material						
		<input type="checkbox"/>	Wafer Bump Process						
		<input type="checkbox"/>	Wafer Fab Site						
		<input type="checkbox"/>	Wafer Fab Materials						
		<input type="checkbox"/>	Wafer Fab Process						
<b>PCN Details</b>									
<b>Description of Change:</b>									
Texas Instruments is pleased to announce the qualification of new assembly material for devices listed in "Product affected" section below. Devices will remain in current assembly facility and piece part changes as follows:									
<table border="1"> <thead> <tr> <th>Material</th> <th>Current</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>Mold compound</td> <td>CZ0339</td> <td>CZ0334</td> </tr> </tbody> </table>				Material	Current	Proposed	Mold compound	CZ0339	CZ0334
Material	Current	Proposed							
Mold compound	CZ0339	CZ0334							
<b>Reason for Change:</b>									
Continuity of supply									
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>									
None									
<b>Anticipated impact on Material Declaration</b>									
<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the <a href="#">TI Eco-Info website</a> . There is no impact to the material meeting current regulatory compliance requirements with this PCN change.						
<b>Changes to product identification resulting from this PCN:</b>									
None									
<b>Product Affected:</b>									
TPS56C215RNNR		TPS56C215RNNT							

# Qualification Report

## TPS56C215RNN New Mold Compound Qual. in UTAC

Approve Date 07-Nov-2017

### Product Attributes

Attributes	Qual Device: TPS56C215RNN	QBS Product Reference: TPS56C215RNN PG1.0	QBS Product Reference: TPS56C215RNN PG2.0	QBS Product Reference: TPS56C215RNN PG2.0	QBS Process Reference: TPS51217DSC
Assembly Site	UTAC	CLARK AT	UTAC	UTAC	CLARK-AT
Package Family	VQFN	VQFN	VQFN	VQFN	WSON
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	RFAB	RFAB	MIHO8	RFAB	RFAB
Wafer Process	LBC7	LBC7	LBC7	LBC7	LBC7

- QBS: Qual By Similarity

- Qual Device TPS56C215RNN is qualified at LEVEL2-260CG

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS56C215RNN	QBS Product Reference: TPS56C215RNN PG1.0	QBS Product Reference: TPS56C215RNN PG2.0
ED	Electrical Characterization	Per Datasheet Parameters	-	-	Pass
HBM	ESD - HBM	5000 V	-	-	1/3/0
CDM	ESD - CDM	2000 V	-	-	1/3/0
LU	Latch-up	(per JESD78)	-	-	1/6/0
HTOL	Life Test, 125C	1000 Hours	-	1/77/0	-
HTOL	Life Test, 135C	635 Hours	-	-	-
HTSL	High Temp Storage Bake, 170C	420 Hours	3/231/0	-	1/77/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	-	-
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	3/231/0	-	-
AC	Autoclave , 121C	96 Hours	-	-	2/154/0
TC	Temperature Cycle, -55/125C	700 Cycles	-	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	-	3/231/0

Type	Test Name / Condition	Duration	QBS Product Reference: TPS56C215RNN PG2.0	QBS Process Reference: TPS51217DSC
ED	Electrical Characterization	Per Datasheet Parameters	-	Pass
HBM	ESD - HBM	5000 V	-	-
CDM	ESD - CDM	2000 V	-	-
LU	Latch-up	(per JESD78)	-	3/18/0
HTOL	Life Test, 125C	1000 Hours	-	-
HTOL	Life Test, 135C	635 Hours	-	3/231/0
HTSL	High Temp Storage Bake, 170C	420 Hours	-	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-
AC	Autoclave , 121C	96 Hours	-	3/231/0
TC	Temperature Cycle, -55/125C	700 Cycles	1/77/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	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

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

Location	E-Mail
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>