

PCN Number:	20230328005.1			PCN Date:	March 30, 2023												
Title:	Qualification of additional BOM materials for select devices																
Customer Contact:	PCN Manager	Dept:	Quality Services														
Proposed 1st Ship Date:	Jun 26, 2023	Sample requests accepted until:	Apr 28, 2023														
*Sample requests received after April 28, 2023 will not be supported.																	
Change Type:																	
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site												
<input checked="" 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												
PCN Details																	
Description of Change:																	
<p>This PCN is to inform of the qualification of additional BOM items for the devices in the product affected section as follows:</p> <table border="1"> <thead> <tr> <th>What</th> <th>Current</th> <th>New</th> </tr> </thead> <tbody> <tr> <td>Bond Wire Composition, diameter</td> <td>Au, 0.96 mil</td> <td>Cu, 1.0 mil</td> </tr> <tr> <td>Mold Compound</td> <td>4208625</td> <td>4222198</td> </tr> <tr> <td>Mount Compound</td> <td>4207768</td> <td>4207123</td> </tr> </tbody> </table>						What	Current	New	Bond Wire Composition, diameter	Au, 0.96 mil	Cu, 1.0 mil	Mold Compound	4208625	4222198	Mount Compound	4207768	4207123
What	Current	New															
Bond Wire Composition, diameter	Au, 0.96 mil	Cu, 1.0 mil															
Mold Compound	4208625	4222198															
Mount Compound	4207768	4207123															
Reason for Change:																	
Continuity of supply																	
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):																	
None																	
Impact on Environmental Ratings																	
<p>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.</p> <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														
Changes to product identification resulting from this PCN:																	
None																	
Product Affected:																	
BQ24232HRGTR	BQ24232HRGTT	TPS61021DSGR	TPS61021DSGT														

Product Attributes

Attributes	Qual Device: 430F2132IRHBR	Qual Device: BQ24196RGER	Qual Device: TPS51285BRUKR	Qual Device: TPS53641RSBR	Qual Device: TPS62140RGTR	QBS Package Reference: BQ294504DRVR	QBS Package Reference: TRS3122ERGER
Assembly Site	CHENGDU A/T	CHENGDU A/T	CHENGDU A/T	CHENGDU A/T	CHENGDU A/T	CHENGDU A/T	CHENGDU A/T
Package Family	VQFN	VQFN	WQFN	WQFN	VQFN	WQFN	VQFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	TSMC WFT	RFAB	RFAB	RFAB	MIHO-8	RFAB	RFAB
Wafer Fab Process	TSMC EMB FLASH	LBC7	LBC7X	LBC7X	LBC7X	LBC7	LBC7

- QBS: Qual [By](#) Similarity

- Qual Devices qualified at LEVEL2-260CG : TPS62140RGTR, BQ24196RGER, 430F2132IRHBR, TPS51285BRUKR, TPS53641RSBR, BQ294504DRVR, TRS3122ERGER

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: 430F2132IRHBR	Qual Device: BQ24196RGER	Qual Device: TPS51285BRUKR	Qual Device: TPS53641RSBR	Qual Device: TPS62140RGTR	QBS Package Reference: BQ294504DRVR	QBS Package Reference: TRS3122ERGER
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	-	Pass	-	Pass
FLAM	Flammability (IEC 695-2-2)	-	-	-	-	-	-	-	3/15/0
FLAM	Flammability (UL 94V-0)	-	-	-	-	-	-	-	3/15/0
FLAM	Flammability (UL-1694)	-	-	-	-	-	-	-	3/15/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	3/231/0	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	3/231/0	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0
WBP	Bond Pull	76 Wire, 3 units min	3/228/0	3/228/0	3/228/0	3/228/0	3/228/0	-	3/228/0
WBS	Ball Bond Shear	76 balls, 3 units min	3/228/0	3/228/0	3/228/0	3/228/0	3/228/0	-	3/228/0

- 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: 20160218-116848, 20160217-116812 (QBS), 20160119-116479 (QBS)

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

Location	E-Mail
WW Change Management Team	PCN_ww_admin_team@list.ti.com

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF

MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale (www.ti.com/legal/termsofsale.html) or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.