

<b>PCN Number:</b>	20170927001-001	<b>PCN Date:</b>	Oct. 3, 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>	Apr 01, 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 checked="" 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"/>		<input type="checkbox"/>	Wafer Bump Site									
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Material									
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Process									
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Site									
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Materials									
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Process									
<b>PCN Details</b>												
<b>Description of Change:</b>												
<p>Texas Instruments is pleased to announce the qualification of new assembly material set for devices listed in "Product affected" section below. Devices will remain in current assembly facility and piece part changes as follows:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Material</th> <th>Current</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>Mount compound</td> <td>4042500, 4208458</td> <td>4211470</td> </tr> <tr> <td>Mold compound</td> <td>4205694</td> <td>4209640</td> </tr> </tbody> </table>				Material	Current	Proposed	Mount compound	4042500, 4208458	4211470	Mold compound	4205694	4209640
Material	Current	Proposed										
Mount compound	4042500, 4208458	4211470										
Mold compound	4205694	4209640										
<b>Reason for Change:</b>												
Continuity of supply.												
<b>Anticipated impact on Fit, Form, 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>												
ISO721MMDREP	ISO7241AMDWREP	V62/10606-01XE										
ISO721MMDREPG4	V62/08627-01XE											

## Qualification Plan

**BCB site change from Amkor K4 to TIEM as well as BOM  
change to latest approved ISO BOM**  
(Qualification Target date: Apr 01, 2018)

### Product Attributes

Attributes	Qual Device: AMC1203BD UB	Qual Device: ISO7221AQD RQ1	Qual Device: ISO7221 CD	Qual Device: ISO7221C HD	Qual Device: AMC1203B DW	Qual Device: ISO3082 DW	Qual Device: ISO35TD W	Qual Device: ISO7241CQDW RQ1
<b>Assembly Site</b>	HNT	TAI	TAI	TAI	TAI	TAI	TAI	TAI
<b>Package Family</b>	SOP	SOIC	SOIC	SOIC	SOIC	SOIC	SOIC	SOIC
<b>Flammability Rating</b>	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	UL 94 V-0
<b>Wafer Fab Supplier</b>	DFAB, TSMC	DFAB	DFAB	DFAB	DFAB, TSMC	DFAB	DFAB	DFAB
<b>Wafer Fab Process</b>	0.5UM, LBC4	LBC4	LBC4	LBC4	0.5UM, LBC4	LBC3S, LBC4	LBC4, lbc3s	LBC4

- QBS: Qual By Similarity

- Qual Devices ISO7221CHD and ISO7221CD are qualified at LEVEL1-260C

- Qual Devices ISO3082DW and ISO35TDW are qualified at LEVEL2-260C

- Qual Devices ISO7241CQDWRQ1, AMC1203BDUB, AMC1203BDW, and ISO7221AQDRQ1 are qualified at LEVEL3-260C

- The following Devices contain multiple dies: ISO35TDW, ISO7221CHD, ISO7221CD, ISO7241CQDWRQ1, AMC1203BDUB, ISO7221AQDRQ1, AMC1203BDW, ISO3082DW

### Qualification Plan

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

Type	Test Name / Condition	Duration	Qual Device: ..AMC1203BDUB	Qual Device: .ISO7221AQDRQ1	Qual Device: .ISO7221CD	Qual Device: .ISO7221CHD
AC	Autoclave 121C	96 Hours	3/77/TBD	3/77/TBD	3/77/TBD	1/77/TBD
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	TBD	TBD	TBD
HAST	**Biased HAST 130C/85%RH	96 Hours	3/77/TBD	3/77/TBD	3/77/TBD	-
HTOL	Life Test, 140C	480 Hours	-	3/77/TBD	-	-
HTSL	High Temp. Storage Life, 175C	500 Hours	-	1/45/TBD	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/77/TBD	-	3/77/TBD	-
TC	Temperature Cycle, -65/150C	Cycles	3/77/TBD	3/77/TBD	3/77/TBD	-

Type	Test Name / Condition	Duration	Qual Device: ..AMC1203BDUB	Qual Device: .ISO7221AQDRQ1	Qual Device: .ISO7221CD	Qual Device: .ISO7221CHD
WBP	Bond Pull	76 Wires, 3 units min	3/76/TBD	3/76/TBD	3/76/TBD	3/76/TBD
WBS	Ball Bond Shear	Wires	3/76/TBD	3/76/TBD	3/76/TBD	3/76/TBD

Type	Test Name / Condition	Duration	Qual Device: AMC1203BDW	Qual Device: ISO3082DW	Qual Device: ISO35TDW	Qual Device: ISO7241CQDWRQ1
AC	Autoclave 121C	96 Hours	1/77/TBD	1/77/TBD	1/77/TBD	3/77/TBD
ED	Electrical Characterization	Per Datasheet Parameters	TBD	TBD	TBD	-
HAST	**Biased HAST 130C/85%RH	96 Hours	-	-	-	3/77/TBD
HTOL	Life Test, 140C	480 Hours	-	-	-	3/77/TBD
HTSL	High Temp. Storage Life, 175C	500 Hours	-	-	-	1/45/TBD
HTSL	High Temp. Storage Bake, 170C	420 Hours	1/77/TBD	1/77/TBD	1/77/TBD	-
TC	Temperature Cycle, - 65/150C	Cycles	1/77/TBD	1/77/TBD	1/77/TBD	3/77/TBD
WBP	Bond Pull	76 Wires, 3 units min	1/76/TBD	1/76/TBD	1/76/TBD	3/76/TBD
WBS	Ball Bond Shear	Wires	1/76/TBD	1/76/TBD	1/76/TBD	3/76/TBD

- 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.

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