

PCN Number:	20220525000.1		PCN Date:		
Title:	Qualification of Cu as an alternate bond wire for select devices				
Customer Contact:	PCN Manager	Dept:	Quality Services		
Proposed 1st Ship Date:	Aug 24, 2022	Sample Requests accepted until:	June 26, 2022		
*Sample requests received after June 26, 2022 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"/>	Wafer Fab Process
PCN Details					
Description of Change:					
This PCN is to inform of the qualification of an alternate bond wire qualification as follows:					
Current Bond wire/Diameter (all bond wires)		Additional Bond wire & diameter (die to leadframe only)			
Au, 0.96 mil		Cu, 0.96 mil			
Reason for Change:					
Continuity of supply. 1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties 2) Maximize flexibility within our Assembly/Test production sites. 3) Cu is easier to obtain and stock					
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	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:			
BQ7693000DBT	BQ7693004DBTR	BQ7694001DBT	BQ7694005DBT
BQ7693000DBTR	BQ7693005DBT	BQ7694001DBTR	BQ7694005DBTR
BQ7693001DBT	BQ7693005DBTR	BQ7694002DBT	BQ7694006DBT
BQ7693001DBTR	BQ7693006DBT	BQ7694002DBTR	BQ7694006DBTR
BQ7693002DBT	BQ7693006DBTR	BQ7694003DBT	BQ7694007DBT
BQ7693002DBTR	BQ7693007DBT	BQ7694003DBTR	BQ7694007DBTR
BQ7693003DBT	BQ7693007DBTR	BQ7694004DBT	SN7693003DBT
BQ7693003DBTR	BQ7694000DBT	BQ7694004DBTR	SN7693003DBTR
BQ7693004DBT	BQ7694000DBTR		



TI Information
Selective Disclosure

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

Type	Test Name / Condition	Duration	Qual Device: BQ7693003DBTR	Qual Device: BQ7694003DBTR	QBS Process Reference: TPS2543QRTE	QBS Package Reference: BQ8040DBI	QBS Package Reference: TAS5086DBI
AC	Autoclave 121C	96 hours	-	3/231/0	3/231/0	-	3/231/0
CDM	ESD - CDM	1500 V	-	-	1/3/0	-	-
ED	Electrical Characterization	Per Datasheet Parameters	-	-	3/Pass	1/Pass	-
ELFR	Early Life Failure Rate, 150C	24 Hours	-	-	3/2400/0	-	-
HAST	Biased HAST 110C/85%RH	264 Hours	1/77/0	-	-	-	-
HAST	Biased HAST 130C/85%RH	96 Hours	-	-	3/231/0	-	3/226/0
HBM	ESD - HBM	4000 V	-	-	1/3/0	-	-
HTOL	Life Test, 150C	408 Hours	-	-	3/231/0	-	-
HTOL	Life Test, 155C	240 hours	-	-	-	-	3/231/0
HTSL	High Temp Bake 150C	1000 hours	1/77/0	3/231/0	-	-	-
HTSL	High Temp Bake 170C	420 hours	-	-	-	-	3/231/0
HTSL	High Temp Bake 175C	500 Hours	-	-	3/149/0	-	-
LU	Latch-up	-	-	-	1/6/0	-	-
PTC	Power Temp Cycle, - 40/125C	1000 Cycles	-	-	1/45/0	-	-
TC	Temp Cycle -65/150C	500 Cycles	1/77/0	3/231/0	3/231/0	1/77/0	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

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
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN 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.