

<b>PCN Number:</b>	20150112002		<b>PCN Date:</b>	02/12/2015	
<b>Title:</b>	TLE4275QKVURQ1 Cu wire and Mold Compound change				
<b>Customer Contact:</b>	PCN_ww_admin_team@list.ti.com		<b>PCN Type:</b>	180 day	<b>Dept:</b> Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	08/12/2015		<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"/>	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"/>		<input type="checkbox"/>	Wafer Fab Process
<b>PCN Details</b>					
<b>Description of Change:</b>					
Texas Instruments Incorporated is announcing a change to TLE4275QKVURQ1 of the following materials.					
<b>From:</b>		<b>To:</b>			
<b>Mold Compound</b>	SID# R-0	SID# R-23			
<b>Bond Wire</b>	Au	Cu			
<b>Reason for Change:</b>					
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) Copper wire is easier to obtain and stock.					
<b>Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):</b>					
No anticipated impact.					
<b>Changes to product identification resulting from this PCN:</b>					
None					
<b>Product Affected:</b>					
TL720M05QKVURQ1		TL751M08QKVURQ1			
TL750M05QKVURQ1		TL751M12QKVURQ1			
TL750M08QKVURQ1		TL760M33QKVURQ1			
TL750M12QKVURQ1		TLE4275QKVURQ1			
TL751M05QKVURQ1					

**Automotive New Product Qualification Summary**  
(As per AEC-Q100 and JEDEC Guidelines)

This is for TLE4275QKVURQ1 Cu wire conversion  
Approved 12/15/2014

Attributes	Qual Device: TLE4275QKVURQ1
Qual ID	20140422-104102
Operating Temp Range	-40°C to +125°C
Automotive Grade Level	Grade 1
Wafer Fab Site	SFAB
Die Revision	D
Assembly Site	NFME
Package Type	LEADED
Package Designator	KVU
Ball/Lead Count	5

- QBS: Qual By Similarity

- Qual Device TLE4275QKVURQ1 is qualified at LEVEL3-260CG

**Qualification Results**

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

Type	#	Test Spec	Min Lot Qty	SS/Lot	Test Name / Condition	Duration	Qual Device: TLE4275QKVURQ1
Qual ID							20140422-104102
<b>Test Group A - Accelerated Environment Stress Test</b>							
PC	A1	JESD22-113	-	-	PreCon Level 3	MSL3, 260C peak	3/all/0
HAST	A2	JESD22-A110	3	77	Biased HAST, 130C/85%RH	240 hrs	3/231/0
AC	A3	JESD22-A102	3	77	Autoclave 121C	240 hrs	3/231/0
TC	A4	JESD22-A104	3	77	Temperature Cycle, -65/150C	500 cycles	3/231/0
		MIL-STD883 Method 2011	1	30	Bond Pull	Post T/C 500 cycles	1/5/0
PTC	A5	JESD22-A105	1	45	Power Temperature Cycle, -40/125C	1000 cycles	1/50/0
HTSL	A6	JESD22-A103	1	45	High Temp Storage Bake 175C	500 hrs	1/45/0
<b>Test Group B - Accelerated Lifetime Simulation Test</b>							
<b>Test Group C - Package Assembly Integrity Tests</b>							
WBS	C1	AEC-Q100-001	1	30	Wire Bond Shear		Covered in Manufacturability Qualification
WBP	C2	MIL-STD883 Method 2011	1	30	Wire Bond Pull		Covered in Manufacturability Qualification
PD	C4	JESD22 B100 and B108	3	10	Auto Physical Dimensions	Cpk>1.33 Ppk>1.67	3/30/0
<b>Test Group D - Die Fabrication Reliability Tests</b>							
<b>Test Group E - Electrical Verification</b>							

ED	E5	AEC-Q100-009	3	30	Auto Electrical Distributions	Cpk>1.67 Room, hot test	1/30/0
<b>Additional Tests</b>							
MQ					Manufacturability (Auto Assembly)	(per automotive requirements)	3/all/0

**A1 (PC): Preconditioning:**

Performed for THB, Biased HAST, AC, uHAST & TC samples, as applicable.

**Ambient Operating Temperature by Automotive Grade Level:**

Grade 0 (or E): -40C to +150C

Grade 1 (or Q): -40C to +125C

Grade 2 (or T): -40C to +105C

Grade 3 (or I) : -40C to +85C

**E1 (TEST): Electrical test temperatures of Qual samples (High temperature according to Grade level):**

Room/Hot/Cold : HTOL

Room/Hot : THB / HAST, TC / PTC, HTSL, ELFR, ESD & LU

Room : AC/uHAST

**Green/Pb-free Status:**

Qualified Pb-Free(SMT) and Green

TI Qualification ID: 20140422-104102

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

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