

12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN 20150112002 TLE4275QKVURQ1 Cu wire and Mold Compound change Final Change Notification

Date: 2/12/2015

To: Newark/Farnell PCN

Dear C ustomer:

This is an announcement of change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

Texas Instruments requires acknowledgement of receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. The proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

If samples or additional data are required, requests must be received within 30 days of acknowledgement as samples are not built ahead of the change. You may contact the PCN Manager or your local Field Sales Representative to acknowledge this PCN and request samples or additional data.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN www admin team@list.ti.com).

Sincerely,

PCN Team SC Business Services

20150112002 Attachments

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE TL720M05QKVURQ1

CUSTOMER PART NUMBER

null

Technical details of this Product Change follow on the next page(s).

PCN Number:			20150112002						PCN	Date:	02/12/2015	
Title:	75QK\	/URQ1 Cu wire and Mold Compound change										
Customer PCN_ww_admi			nin_team@list.ti.com			PCN Ty	ype:	180 day			Dept:	Quality Services
Proposed 1 st	Ship D	ate:	08/12/20	08/12/2015			Estimated Samp Availability:			Date provided at sample request		
Change Type:				71001102								•
Assembly			•	Design					Wafer Bump Site			
Assembly				Data Sheet					☐ Wafer Bump Material			
Assembly					Part number change			ĻĹ		ifer Bump		
Mechanica					Test Site			Wafer Fab Site				
Packing/SI	nipping,	<u>/Labeli</u>	ing	Test Process				┞╞		fer Fab M		
					DCN	Data:la				Wa	ifer Fab P	rocess
Description	f Cham				PCN	Details	5					
Description o	r Cnan	ge:										
Texas Instrume	ents Inc	ornor	ated is ann	nounc	rina a	change t	to TI F	4275	OK۱	/LIRO	1 of the f	ollowing
materials.	SIICS IIIC	.orport	acca is aiii	iounc	ing a	change		- 12, 3	Ų.	onq	1 01 010 1	onowing
		Fron	n:		To:							
Mold Compound SID#			R-0 SID			# R-23						
Bond Wire Au				Cu								
Reason for Ch												
Continuity of s												
1) To align with world technology trends and use wiring with enhanced mechanical and								l and				
electrical properties.												
2) Maximize flexibility within our Assembly/Test production sites3) Copper wire is easier to obtain and stock.												
Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):												
No anticipated impact.												
Changes to product identification resulting from this PCN:												
None												
Product Affect	ted:											
TL720M05QKV	TL75:	1M08	M08QKVURQ1									
TL750M05QKV	TL75:	51M12QKVURQ1										
TL750M08QKVURQ1				OM33	//33QKVURQ1							
TL750M12QKVURQ1				275Qk	75QKVURQ1							
TL751M05QKV												

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

Typ e	#	Test Spec	Min Lot Qty	SS/L ot	Test Name / Condition	Duration	Qual Device: TLE4275QKVURQ1
Qual ID							20140422-104102
		up A - Accelerated ent Stress Test					
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	АЗ	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
		ıp B - Accelerated n Test	Lifetime				
Test Group C - Package Assembly Integrity Tests							
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
	Test Group D - Die Fabrication Reliability Tests						
Test 0	Test Group E - Electrical Verification						

ED	E5	AEC-Q100-009	3	30	Auto Electrical Distributions	Cpk>1.67 Room, hot test	1/30/0
Addit	iona	l Tests					
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

 ${\sf Room/Hot: THB\,/\,HAST,\,TC\,/\,PTC,\,HTSL,\,ELFR,\,ESD\,\&\,LU}$

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.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com