

PCN#20141217000 Qualification of alternate Bond Wire Material (Au) for the LM43602/3PWP family of Devices Change Notification / Sample Request

Date: 1/12/2015 To: Newark/Farnell PCN

Dear Customer:

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

We request you acknowledge 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. If you require samples or additional data to support your evaluation, please request within 30 days.

The changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

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 (<u>PCN_ww_admin_team@list.ti.com</u>).

Sincerely,

PCN Team SC Business Services Phone: +1(214) 480-6037 Fax: +1(214) 480-6659

20141217000 Attachment: 1

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

LM43602PWPT LM43603PWPT

CUSTOMER PART NUMBER

null null

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

PCN Number:			20141217000							PCN Date:		12/18/2014		
Title: Qualificati			ation o	of al	ternate Bor	nd W	/ire Mat	erial (Au) fo	or the	LM4	3602/3PV	VP f	amily of devices	
Customer Contact:			PCN Manager			Ph	one:	+1(214)480-6037			Dept:	Q	uality Services	
Proposed 1 st Ship Date:			p	03/18/2015			Estima	ited Sample Availability			ility:		Date provided upon request	
Change Type:														
Assembly Site			e		Assembl	Assembly Process			Ass	Assembly Materials				
Design					Electrical Specification Me			Mec	echanical Specification					
Test Site					Packing/Shipping/Labeling			Tes	Test Process					
Wafer Bump Site				Wafer Bump Material			Waf	Wafer Bump Process						
Wafer Fab Site				Wafer Fab Materials Wa			Waf	Vafer Fab Process						
Part number change														
							PCN [Details						
Dee	Description of Changes													

Description of Change:

Texas Instruments is pleased to announce the qualification of Gold as an alternate bond wire for the LM43602/3PWP family of devices.

What	Current	New		
Bond Wire Composition/Diameter	Cu/2.0 mils	Au/2.0 mils & Cu/2.0 mils		

Reason for Change:

Continuity of Supply

Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

None

Changes to product identification resulting from this PCN:

None

Product Affected

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LM43602PWP	LM43602PWPT	LM43603PWPR	LM43603PWPT						
LM43602PWPR	LM43603PWP								



Qualification Report

New Product Qualification LM43603PWP, LBC8+MetDCu (DMOS5) 16-pin HTSSOP (PWP) MSL2 260C, AU wire 2mil, TI-TL (Taiwan). Approved 12/16/2014

Product Attributes

Attributes	Qual Device: LM43603PWP	QBS Product: LM43602PWP	QBS Product: LM46002PWP	QBS Product: LM46002PWP	QBS Process: LM43603PWP	QBS Package: BUF16821AIPWPRQ1	QBS Package: LM43603PWP
Assembly Site	TITL (TAI)	TITL (TAI)					
Package Family	PWP	PWP	PWP	PWP	PWP	TSSOP	PWP
Flammability Rating	UL 94 V-0	UL 94 V-0					
Wafer Fab Supplier	DMOS5	DMOS5	DMOS5	DMOS5	DMOS5	DMOS5	DMOS5
Wafer Fab Process	LBC8	LBC8	LBC8	LBC8	LBC8	50HPS07	LBC8

QBS: Qual By Similarity
Qual Device LM43603PWP is qualified at LEVEL2-260C

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

Туре	Test Name / Condition	Duration	Qual Device: LM43603PWP	QBS Product: LM43602PWP	QBS Product: LM46002PWP	QBS Process: LM46002PWP	QBS Process: LM43603PWP	QBS Package: BUF16821AIPWPRQ1	QBS Package: LM43603PWP
HAST	Biased HAST, 110C/85%RH	264 hours	-	-	-	2/157/0	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	3/239/0	-
AC	Autoclave 121C	96 Hours	-	-	1/77/0	-	3/230/0	3/244/0	3/230/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	1/77/0	-	3/230/0	3/244/0	3/230/0
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	-	-	1/76/0	-	1/76/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	-	-	1/50/0	-
HTOL	Life Test, 150C	300 hours	-	1/77/0	-	3/240/0	-	-	-
HBM	ESD - HBM	2000 V	-	1/3/0	-	-	-	-	-
CDM	ESD - CDM	750 V	-	1/3/0	-	-	-	-	-
LU	Latch-up	(per JESD78)	-	1/6/0	-	-	-	-	-
ED	Electrical Characterization		Pass	Pass	-	-	-	-	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	-	-	-	-	-	-

- 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.

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