



**12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

**PCN# 20140320003**  
**Design Change (for TPS54623RHLLR and TPS54623RHLLT Devices)**  
**Change Notification / Sample Request**

**Date:** 4/3/2014  
**To:** MOUSER 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 ([PCN\\_ww\\_admin\\_team@list.ti.com](mailto:PCN_ww_admin_team@list.ti.com)).

Sincerely,

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

**20140320003**  
**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.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
TPS54623RHLT	null

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

<b>PCN Number:</b>	20140320003			<b>PCN Date:</b>	04/03/2014				
<b>Title:</b>	Design Change (for TPS54623RHLLR and TPS54623RHLLT Devices)								
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Phone:</b>	+1(214)480-6037	<b>Dept:</b>	Quality Services				
<b>Proposed 1<sup>st</sup> Ship Date:</b>	07/03/2014	<b>Estimated Sample Availability:</b>		Date provided at sample request					
<b>Change Type:</b>									
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials				
<input checked="" type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification				
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process				
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process				
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process				
		<input type="checkbox"/>	Part number change						
<b>PCN Details</b>									
<b>Description of Change:</b>									
<p>This notification is to inform of a design change for TPS54623RHLLR and TPS54623RHLLT devices. This design change does not affect the device's guaranteed datasheet specifications or electrical performance. Affected devices are listed in "Product Affected" section.</p> <p>The table below describes changes that were made:</p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Description of Change</th> <th style="text-align: left;">Benefit of Change</th> </tr> </thead> <tbody> <tr> <td>All layer change to improve EcoMode Feature. The design change affects about 5% of the IC circuit in LDO-Error Amplifier block. Adding an NMOS in LDO and a logic inverter in Error Amplifier.</td> <td>Continuous Improvement</td> </tr> </tbody> </table>						Description of Change	Benefit of Change	All layer change to improve EcoMode Feature. The design change affects about 5% of the IC circuit in LDO-Error Amplifier block. Adding an NMOS in LDO and a logic inverter in Error Amplifier.	Continuous Improvement
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All layer change to improve EcoMode Feature. The design change affects about 5% of the IC circuit in LDO-Error Amplifier block. Adding an NMOS in LDO and a logic inverter in Error Amplifier.	Continuous Improvement								
<b>Reason for Change:</b>									
To address EcoMode issue.									
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>									
None									
<b>Changes to product identification resulting from this PCN:</b>									
None									
<b>Product Affected:</b>									
TPS54623RHLLR		TPS54623RHLLT							

### Qualification Data: Approved 3/14/2014

This qualification has been specifically developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

#### Qual Vehicle 1: TPS54623

#### Package/Die Construction Details

Assembly Site:	CLARK AT	# Pins-Designator, Family:	14-RHL, QFN
Die Revision:	A	Package Type:	QFN/SON

#### Qualification: ☐ Plan ☒ Test Results

Reliability Test	Conditions	Sample Size (PASS/FAIL)
Electrical Characterization, side by side	-	PASS
Latch-up	(per JESD78)	6/0
Life Test	125C (168 Hrs)	80/0
ESD CDM	+/- 250V	3/0
ESD HBM	+/- 1000V	3/0

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

Location	E-Mail
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>