



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

**Notification# 20170717001  
Datasheet for TPS74401  
Information Only**

**Date:** July 26, 2017  
**To:** TOKYO ELECTRON DEVICE (DSTR) PCN

Dear Customer:

This is an information-only announcement of a change to the datasheet for a device that is currently offered by Texas Instruments.

The changes discussed within this notification are for your information only.

Any negotiated alternative change requirements will be provided via the customer's defined process. Customers with previously negotiated, special requirements will be handled separately. Any inquiries should be directed to your local Field Sales Representative.

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

**Information Only**  
**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.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
TPS74401KTWR	null
TPS74401KTWT	null
TPS74401RGWT	null
TPS74401RGWR	null

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

<b>PCN Number:</b>	20170717001	<b>PCN Date:</b>	July 26, 2017
<b>Title:</b>	Datasheet for TPS74401		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<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 checked="" type="checkbox"/> Data Sheet	<input type="checkbox"/> Wafer Bump Material	
<input 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	

## Notification Details

### Description of Change:

Texas Instruments Incorporated is announcing an information only notification. The product datasheet(s) is being updated as summarized below. The following change history provides further details.



**TPS74401**

SBVS066R – DECEMBER 2005 – REVISED APRIL 2017

### Changes from Revision Q (April 2015) to Revision R

**Page**

Added RGR package to document .....	1
Changed TPS744xx to TPS74401 throughout document .....	1
Changed <i>Packages</i> Features bullet .....	1
Changed second paragraph of Description section: added RGR package and changed second to last sentence .....	1
Deleted fixed voltage version of <i>Typical Application Circuit</i> diagram .....	1
Added RGR package to <i>Pin Configuration and Functions</i> section .....	5
Changed FB/SNS to FB in both pin out drawings, deleted TPS744xx from VQFN package .....	5
Changed <i>Surface Mount</i> to <i>Top View</i> in KTW pin out drawing .....	5
Changed <i>input capacitor</i> to <i>bias capacitor</i> in BIAS pin description .....	5
Deleted ( <i>adjustable version only</i> ) from description of FB pin in <i>Pin Functions</i> table .....	5
Changed I/O column value to — from O for NC pins of <i>Pin Functions</i> table .....	5
Deleted SNS pin from <i>Pin Functions</i> table .....	5
Added RGR package to <i>Thermal Information</i> table .....	7
Deleted ( <i>adjustable version</i> ) from $V_{REF}$ parameter name in <i>Electrical Characteristics</i> table .....	7
Deleted SNS pin reference from $I_{FB}$ , $I_{SNS}$ parameter: changed symbol from $I_{FB}$ , $I_{SNS}$ to $I_{FB}$ , deleted <i>sense</i> from parameter name .....	7
Deleted <i>adjustable</i> from footnote 1 and deleted $I_{SNS}$ from footnote 4 of <i>Electrical Characteristics</i> table .....	7
Changed conditions of $R_1$ , $R_2$ in <i>Noise Spectral Density</i> figure .....	11
Deleted <i>Fixed Voltage Versions</i> figure from <i>Functional Block Diagram</i> section .....	14
Changed first paragraph of <i>Application Information</i> section: deleted <i>and tracking capabilities</i> from first sentence and changed <i>very low input and output voltages</i> to <i>very low output voltages with low <math>V_{IN}</math> to <math>V_{OUT}</math> headroom</i> in last sentence .....	18
Changed title of first typical application from <i>Adjustable Voltage Part and Setting to Setting the TPS74401</i> .....	20
Deleted reference to adjustable version in first sentence and <i>Typical Application Circuit for the TPS74401</i> figure in first typical application section .....	20
Changed <i>Because <math>V_{IN} \geq V_{OUT} + 1.62</math> V to Because <math>V_{IN}</math> is less than <math>V_{OUT}</math> plus the <math>V_{BIAS}</math> dropout and <math>V_{BIAS} = V_{IN}</math> to <math>V_{BIAS} = V_{OUT}</math></i> in last paragraph of <i>Detailed Design Procedure</i> in first typical application section .....	21
Deleted <i>Fixed Voltage and Sense Pin</i> section .....	23
Deleted BIAS recommendation from <i>Layout Guidelines</i> section .....	25
Changed <i>RGW Package</i> to <i>VQFN Packages</i> in caption of <i>Layout Schematic</i> figure .....	25
Added RGR package to VQFN description in <i>Power Dissipation</i> section .....	26
Added RGR package to <i>Thermal Considerations</i> section .....	27

The datasheet number will be changing.

Device Family	Change From:	Change To:
TPS74401	SBVS066Q	SBVS066R

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/TPS74401>

**Reason for Change:**

To accurately reflect device characteristics.

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

No anticipated impact. This is a specification change announcement only. There are no changes to the actual device.

**Changes to product identification resulting from this PCN:**

None.

**Product Affected:**

TPS74401KTWR	TPS74401KTWRG3	TPS74401KTWT	TPS74401KTWTG3
TPS74401RGRR	TPS74401RGRT	TPS74401RGWR	TPS74401RGWRG4
TPS74401RGWT	TPS74401RGWTG4		

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	<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>