



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**PCN# 20140204001
Datasheet update for TPS2420/TPS2421-x/TPS2590/TPS25910
Information Only**

Dear Customer:

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

The changes discussed within this PCN are for your information only. Please see the attachment details for the planned implementation date.

This notification period is per TI's standard process. 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).


Sincerely,

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

PCN# 20140204001
Attachment: 1

Products Affected:

According to our records, there are the affected device(s) that you have purchased within the past twenty-four (24) months. Technical details of this Product Change follow on the next page(s).

PCN Number:	20140204001			PCN Date:	02/13/2014
Title:	TPS2420/TPS2421-x/TPS2590/TPS25910 datasheet				
Customer Contact:	PCN Manager	Phone:	+1(214) 480-6037	Dept:	Quality Services
Change Type:					
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Design	<input checked="" 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		
PCN Details					
Description of Change:					
<p>The product datasheet(s) is being update to remove lower Vlimit reference from page one.</p> <p>The following change history provides further details. These changes may be reviewed at the datasheet links provided</p>					
		TPS2420			
www.ti.com		SLUS903F – JANUARY 2009 – REVISED JANUARY 2014			
REVISION HISTORY					
Changes from Revision E (May 2013) to Revision F					Page
• Deleted the minimum voltage from the voltage range listed in the document title, features list and description					1
• Added 5-A to document title					1
• Changed <i>listed</i> to <i>recognized</i> in last <i>FEATURES</i> bullet. Also added 2367 to UL number					1
• Added SSDs, PCIE, and Fan Control to the <i>APPLICATIONS</i> list					1
• Added UV turn-on threshold and bus text to the first paragraph of the <i>DESCRIPTION</i>					1
• Changed 3.0 V to 20.0 V to VIN in the schematic					1
• Deleted <i>PRODUCT INFORMATION</i> table					2

REVISION HISTORY

Changes from Revision G (May 2013) to Revision H

Page

Deleted minimum voltage from voltage range in the document title, features list and description	1
Added 5-A to document title	1
Changed <i>listed</i> to <i>recognized</i> in UL <i>FEATURES</i> bullet, also added specific UL number	1
Added SSDs, PCIE, and Fan Control to the <i>APPLICATIONS</i> list	1
Added maximum-UV turn-on threshold of 2.9 V sentence to the first paragraph of the <i>DESCRIPTION</i>	1
Deleted capacitor, C_{VIN} , and diode from the <i>Typical Application</i> image. Also changed R_{SET} to R_{RSET} and C_{OUT} to C_{LOAD} . Removed voltage range and changed OUT to VOUT. Also removed note on the former C_{OUT} stating that this is only required in systems with lead and/or load inductance	1
Changed C_{OUT} to C_{LOAD} and R_{SET} to R_{RSET} throughout document	1
Changed C_{OUT} to C_{VOUT} for the power limit parameter in the <i>ELECTRICAL CHARACTERISTICS</i> table	3
Changed current limit value of the ISET description from 125% to 150% in the <i>TERMINAL FUNCTIONS</i> table. Also removed <i>TPS2421 only</i> text from this description	6
Added note for TPS2421-1 to the V_{IN} description in the <i>PIN DESCRIPTION</i> section	7
Changed $R_{SET} = 100\text{ k}\Omega$ to $R_{RSET} = 100\text{ k}\Omega$ in the <i>FAULT CURRENT vs JUNCTION TEMPERATURE</i> graph	8
Changed V_{IN} to V_{VIN} in the functional block diagram, Equation 6, and Equation 7	13
Changed I_n to V_{VIN} in Equation 21	18

TPS2590

REVISION HISTORY

Changes from Revision F (May 2013) to Revision G

Page

Deleted the minimum voltage from the voltage range listed in the document title, features list and description	1
Added 5-A to document title	1
Changed <i>listed</i> to <i>recognized</i> in last Features bullet. Also added 2367 to UL number	1
Added SSDs, PCIE, and Fan Control list items to the <i>APPLICATIONS</i> list	1
Added UV turn-on threshold and bus voltage text to the first paragraph of the <i>DESCRIPTION</i>	1
Deleted <i>ORDERING INFORMATION</i> table	2

REVISION HISTORY**Changes from Revision C (May 2013) to Revision D****Page**

• Deleted the minimum voltage from the voltage range listed in the document title, features list and description	1
• Added 6.5-A to document title	1
• Changed <i>listed</i> to <i>recognized</i> in last <i>FEATURES</i> bullet	1
• Added 2367 to UL number in the <i>FEATURES</i> list. Moved File Number to same list item as UL Recognized	1
• Added PCIE and Fan Control to the <i>APPLICATIONS</i> list	1
• Deleted <i>where the load is powered by busses up to 20 V</i> from the first paragraph of the <i>DESCRIPTION</i> and replaced it with UV turn-on threshold and bus voltage text	1
• Deleted <i>ORDERING INFORMATION</i> table	2

The datasheet number will be changing.

Device Family	Change From:	Change To:
TPS2420	SLUS903E	SLUS903F
TPS2421-X	SLUS907G	SLUS907H
TPS2590	SLUS960F	SLUS960G
TPS25910	SLUSAR6C	SLUSAR6D

The updated datasheet(s) can be accessed by the following link(s):

<http://www.ti.com/product/TPS2420>
<http://www.ti.com/product/TPS2421-1>
<http://www.ti.com/product/TPS2590>
<http://www.ti.com/product/TPS25910>

Reason for Change:

To more accurately reflect device characteristics.

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

Electrical specification performance changes as indicated above.

Changes to product identification resulting from this PCN:

None

Product Affected:

TPS2420RSAR	TPS2421-1DDAR	TPS2590RSAR	TPS25910RSAT
TPS2420RSAT	TPS2421-2DDA	TPS2590RSAT	
TPS2421-1DDA	TPS2421-2DDAR	TPS25910RSAR	

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