PCN Number:	20140317000	PCN Date:	03/18/2014
Title:	Datasheet update for TPS54340/TPS54360/TPS54540/TPS54560		
Customer Contact:	PCN Manager	Phone: +1(214)480-6037	Dept: Quality Services
Proposed 1st Ship Date:	06/18/2014		
Change Type:			

☐	Assembly Site	☐	Design	☐	Wafer Bump Site
☐	Assembly Process	☒	Data Sheet	☐	Wafer Bump Material
☐	Assembly Materials	☐	Part number change	☐	Wafer Bump Process
☐	Mechanical Specification	☐	Test Site	☐	Wafer Fab Site
☐	Packing/Shipping/Labeling	☐	Test Process	☐	Wafer Fab Materials
				☐	Wafer Fab Process

PCN Details

Description of Change:

The product datasheet(s) is being update to increased RT/CLK high max threshold change.

The following change history provides further details.

TPS54340

SLVSBK0B – OCTOBER 2012 – REVISED MARCH 2014

www.ti.com

5 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

Changes from Revision A (February 2013) to Revision B	Page
• Changed the data sheet to the new TI layout	1
• Changed the Application List From: 12 V, 24 V and 48 V Industrial To: 12 V, 24 V Industrial	1
• Added the Device Information table	1
• Added the Handling Ratings table	4
• Added the Recommended Operating Conditions table	4
• Added the Thermal Information table inside the document	4
• Changed the Operating: nonswitching supply current TEST CONDITIONS From: FB = 0.83 V To: FB = 0.9 V	5
• Changed RT/CLK high threshold MAX value From: 1.7 V To: 2 V	5
• Changed Figure 6 title From: HIGH FREQUENCY RANGE To: LOW FREQUENCY RANGE	6
• Changed Figure 7 title From: LOW FREQUENCY RANGE To: HIGH FREQUENCY RANGE	7
• Added the Power Supply Recommendations section	34

TPS54360

SLVSBB4E – AUGUST 2012 – REVISED MARCH 2014

www.ti.com

5 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

Changes from Revision D (February 2013) to Revision E — **Page**

- Changed the data sheet to the new TI layout 1
- Added the Device Information table 1
- Added the Handling Ratings table 4
- Added the Recommended Operating Conditions table 4
- Changed the Operating: nonswitching supply current TEST CONDITIONS From: FB = 0.83 V To: FB = 0.9 V 5
- Changed RT/CLK high threshold MAX value From: 1.7 V To: 2 V 5
- Changed Figure 6 title From: HIGH FREQUENCY RANGE To: LOW FREQUENCY RANGE 6
- Changed Figure 7 title From: LOW FREQUENCY RANGE To: HIGH FREQUENCY RANGE 6

Changes from Original (May 2013) to Revision A — **Page**

- Changed the data sheet to the new TI layout 1
- Added the Device Information table 1
- Added the Handling Ratings table 4
- Added the Recommended Operating Conditions table 4
- Changed the ELECTRICAL CHARACTERISTICS Conditions From: VIN = 4.5 to 60 V To: VIN = 4.5 to 42 V 5
- Changed the Operating: nonswitching supply current TEST CONDITIONS From: FB = 0.83 V To: FB = 0.9 V 5
- Changed RT/CLK high threshold MAX value From: 1.7 V To: 2 V 5
- Changed the title of Figure 22 to include a link to the Low Dropout Operation section. 8
- Changed the FBD, removed the Logic block and Shutdown signal from the OV comparator 11
- Changed VF = Forward Drop of the Catch Diode To: V_D = Forward Drop of the Catch Diode 13
- Deleted value TSW = 1 / Fsw from the list following Equation 1 13
- Changed VB2SW = VBOOT + VF To: VB2SW = VBOOT + V_D 13
- Changed VBOOT = (1.41 x V_{IN} - 0.554 - VF / TSW - 1.847 x 10^3 x IB2SW) / (1.41 + 1 / Tsw) To: VBOOT = (1.41 x V_{IN} - 0.554 - V_D x f_{SW} - 1.847 x 10^3 x IB2SW) / (1.41 + f_{SW}) 13
- Deleted figure 5V Start/Stop Voltage 13
- Added a title to Figure 24 13
- Changed the section title From: Selecting the Switching Frequency To: Accurate Current Limit Operation and Maximum Switching Frequency 15
- Changed text in the Synchronization to RT/CLK terminal section From: "0.5 V and higher than 1.7 V" To: "0.5 V and higher than 2 V" 16
- Changed Equation 32 From: (5.13V^2 - 5 V^2) To: 3.43 V^2 - 3.3 V^2) 27
- Changed , VOUT From: 200 mV/div To 100 mV/div 32
- Changed , EN From: 1 V/div To: 2 V/div, VOUT From: 4 V/div To: 2 V/div, and Time = 2 ms/div To: Time = 20 ms/div 32
- Changed , VOUT From: 4 V/div To: 2 V/div 32

5 Revision History

Changes from Original (March 2013) to Revision A	Page
• Changed the data sheet to the new TI layout	1
• Added the Device Information table	1
• Added the Handling Ratings table	4
• Added the Recommended Operating Conditions table	4
• Changed the Operating: nonswitching supply current TEST CONDITIONS From: FB = 0.83 V To: FB = 0.9 V	5
• Changed RT/CLK high threshold MAX value From: 1.7 V To: 2 V	5
• Changed Figure 6 title From: HIGH FREQUENCY RANGE To: LOW FREQUENCY RANGE	6
• Changed Figure 7 title From: LOW FREQUENCY RANGE To: HIGH FREQUENCY RANGE	6
• Added the Power Supply Recommendation section	35
• Changed text in the Safe Operating Area	36

The datasheet number will be changing.

Device Family	Change From:	Change To:
TPS54340	SLVSBK0A	**SLVSBK0B**
TPS54360	SLVSBB4D	**SLVSBB4E**
TPS54540	SLVSBX7	**SLVSBX7A**
TPS54560	SLVSBN0	**SLVSBN0A**

These changes may be reviewed at the datasheet links provided.
http://www.ti.com/product/tps54340
http://www.ti.com/product/tps54360
http://www.ti.com/product/tps54540
http://www.ti.com/product/tps54560

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:

TPS54340DDA	TPS54360DDA	TPS54540DDA	TPS54560DDA
TPS54340DDAR	TPS54360DDAR	TPS54540DDAR	TPS54560DDAR

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

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