

<b>PCN Number:</b>	<b>20190222000.0</b>	<b>PCN Date:</b>	February 28, 2019
<b>Title:</b>	Datasheet for TPS65917-Q1 and TPS65919-Q1		
<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"/>	Assembly Process	<input checked="" type="checkbox"/>	Data Sheet
<input type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Site
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Material
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Site
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Materials
<input type="checkbox"/>		<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.



TPS65917-Q1

SLVSCO4D – JULY 2015 – REVISED FEBRUARY 2019

#### Changes from Revision C (March 2017) to Revision D

Page

- Added footnote recommending not to pull open-drain GPIOs up to an always-on voltage domain ..... [9](#)
- Clarified that LDO1 and LDO2 input pins are not included in this minimum recommended operating voltage. See *Electrical Characteristics: LDO Regulators* for more information. .... [12](#)
- Added LDO and SMPS output capacitance footnote ..... [13](#)
- Added SMPS Output voltage slew rate description ..... [15](#)
- Changed the comparison condition from VCCA to VCC\_SENSE in the *Embedded Power Controller* section..... [32](#)
- Added typical debounce time from POWERHOLD to the enable of the first rail in the power sequence. .... [33](#)
- Changed discharge resistance to match electrical characteristics table ..... [42](#)
- Changed description of clock dithering from internal to external only ..... [44](#)
- Added information about shutdown timing during short circuit detection ..... [45](#)
- Updated POWERGOOD block diagram and description to clarify dual phase operation. .... [46](#)
- Added notes to the *SMPS Controls for DVS* image ..... [48](#)
- Added the equation to convert GPADC code to internal die temperature in the *12-Bit Sigma-Delta General-Purpose ADC (GPADC)* section ..... [52](#)
- Additional description of VSYS\_LO functionality ..... [66](#)
- Added details on identifying device version. .... [69](#)
- SMPS and LDO output capacitance specification further explained ..... [74](#)
- Added design considerations for VCCA capacitance to support loss of power ..... [74](#)
- Corrected 9-Vpp with 7V absolute maximum specification in the *Layout Guidelines* section ..... [79](#)
- Updated requirements relating to measurement of high-side and low-side FETs in the *Layout Guidelines* section... [80](#)
- Updated images and description on differential measurements across high-side and low-side FETs ..... [81](#)



TPS65919-Q1

SLVSDM1A – AUGUST 2017 – REVISED FEBRUARY 2019

#### Changes from Original (August 2017) to Revision A

Page

- Clarified that LDO1 and LDO2 input pins are not included in this minimum recommended operating voltage. See *Electrical Characteristics: LDO Regulators* for more information. .... [12](#)
- Added LDO and SMPS output capacitance footnote ..... [13](#)
- Added SMPS Output voltage slew rate description ..... [15](#)
- Changed the comparison condition from VCCA to VCC\_SENSE in the *Embedded Power Controller* section..... [31](#)

- Added typical debounce time from POWERHOLD to the enable of the first rail in the power sequence. .... 32
- Changed discharge resistance to match electrical characteristics table section ..... 41
- Changed description of clock dithering from internal to external only ..... 43
- Added information about shutdown timing during short circuit detection ..... 44
- Updated POWERGOOD block diagram and description to clarify dual phase operation. .... 44
- Added notes to the *SMPS Controls for DVS* image ..... 46
- Added the equation to convert GPADC code to internal die temperature in the *12-Bit Sigma-Delta General-Purpose ADC (GPADC)* section..... 50
- Additional description of VSYS\_LO functionality ..... 64
- Added details on identifying device version. .... 67
- SMPS and LDO output capacitance specification further explained ..... 72
- Added design considerations for VCCA capacitance to support loss of power ..... 72
- Corrected 9-Vpp with 7V absolute maximum specification in the *Layout Guidelines* section..... 77
- Updated requirements relating to measurement of high-side and low-side FETs in the *Layout Guidelines* section... 78
- Updated images and description on differential measurements across high-side and low-side FETs ..... 79

The datasheet number will be changing.

Device Family	Change From:	Change To:
TPS65917-Q1	SLVSCO4C	SLVSCO4D
TPS65919-Q1	SLVSDM1	SLVSDM1A

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/TPS65917-Q1>

<http://www.ti.com/product/TPS65919-Q1>

**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:**

O917A11CTRGZRQ1	O917A131TRGZTQ1	O917A135TRGZRQ1	O917A148TRGZRQ1	
O917A123TRGZRQ1	O917A132TRGZRQ1	O917A136TRGZRQ1	O917A14DTRGZRQ1	
O917A12ETRGZRQ1	O917A132TRGZTQ1	O917A139TRGZRQ1	O917A14DTRGZTQ1	
O917A130TRGZRQ1	O917A133TRGZRQ1	O917A13ATRGZRQ1	O917A14FTRGZRQ1	
O917A130TRGZTQ1	O917A133TRGZTQ1	O917A13BTRGZRQ1	O917A14FTRGZTQ1	
O917A131TRGZRQ1	O917A134TRGZRQ1	O917A142TRGZRQ1	O917A151TRGZRQ1	
O917A152TRGZRQ1	O919A14CTRGZRQ1	O919A14CTRGZTQ1	O919A14ETRGZRQ1	
O917A152TRGZTQ1	O919A14ETRGZTQ1	O919A152TRGZRQ1	O919A152TRGZTQ1	

For questions regarding this notice, e-mails can be sent to the 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>
WW PCN Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>