

<b>PCN Number:</b>	20180223000	<b>PCN Date:</b>	February 26, 2018
<b>Title:</b>	Datasheet for OPA838		
<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.



OPA838

SBOS867A – AUGUST 2017 – REVISED FEBRUARY 2018

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

Page

• Added OPA837 to the <a href="#">Device Comparison</a> table .....	4
• Changed <a href="#">Device Comparison</a> table note .....	4
• Changed format of pin names in pinout drawings in <a href="#">Pin Configuration and Functions</a> section .....	4
• Added DCK to pinout description in 6-pin SOT-23 and SC70 pinout drawing .....	4
• Changed I/O column header to "TYPE" in <a href="#">Pin Configuration and Functions</a> section .....	4
• Added table note to table to define pin types in <a href="#">Pin Configuration and Functions</a> section .....	4
• Added table note to <a href="#">Absolute Maximum Ratings</a> table .....	5
• Changed bandwidth for 0.1-dB flatness test condition from $V_{OUT} = 2 V_{PP}$ and $G = 10$ to $V_{OUT} = 200 \text{ mV}_{PP}$ and $G = 6$ in the Electrical Characteristics: $V_S = 5 \text{ V}$ table .....	6
• Added values for $V_{OH}$ and $V_{OL}$ parameters at $T_A = -40$ to $+125^\circ\text{C}$ in Electrical Characteristics: $V_S = 5 \text{ V}$ table .....	7
• Changed typical bandwidth for 0.1-dB flatness from 5 MHz to 9 MHz in Electrical Characteristics: $V_S = 3 \text{ V}$ table .....	8
• Changed bandwidth for 0.1-dB flatness test conditions from $V_{OUT} = 2 V_{PP}$ and $G = 10$ to $V_{OUT} = 200 \text{ mV}_{PP}$ and $G = 6$ in Electrical Characteristics: $V_S = 3 \text{ V}$ table .....	8
• Added values for $V_{OH}$ and $V_{OL}$ parameters at $T_A = -40$ to $+125^\circ\text{C}$ in Electrical Characteristics: $V_S = 3 \text{ V}$ table .....	9
• Changed $V_O$ test condition from 20 mV to 200 mV in <a href="#">Figure 5</a> .....	10
• Changed $V_O$ test condition from 20 mV to 200 mV in <a href="#">Figure 6</a> .....	10
• Changed test conditions from $V_{OUT} = 2 V_{PP}$ , $R_F = 0 \Omega$ , $G = 1 \text{ V/V}$ to $R_F = 1 \text{ k}\Omega$ , $R_G = 200 \Omega$ , $R_L = 2 \text{ k}\Omega$ , $G = 6 \text{ V/V}$ in <a href="#">Typical Characteristics: <math>V_S = 3 \text{ V}</math></a> section .....	13
• Changed $V_O$ test condition from 20 mV to 200 mV in <a href="#">Figure 23</a> .....	13
• Changed $V_O$ test condition from 20 mV to 200 mV in <a href="#">Figure 24</a> .....	13
• Added condition statement to <a href="#">Typical Characteristics: Over Supply Range</a> .....	16
• Changed Y-axis label from "Disable and $V_O$ (Bipolar supplies)" to "Disable and $V_{OUT}$ (Bipolar Supplies, Volts)" in <a href="#">Figure 51</a> .....	17
• Changed Y-axis label from "PD and Output Voltages" to "Disable and $V_{OUT}$ (Bipolar Supplies, Volts)" in <a href="#">Figure 52</a> .....	17
• Deleted 5-V supply and changed the Y-axis label of <a href="#">Figure 57</a> .....	18

• Changed specification load value from 1-kΩ to 2-kΩ in <i>Output Voltage Range</i> section.....	21
• Changed first paragraph to correct power down logic in <i>Power-Down Operation</i> section.....	21
• Changed image references in <i>Power-Down Operation</i> section .....	21
• Changed V1 value from 2.5 Ω to 2.5 V in <i>Figure 64</i> .....	22
• Changed V2 value from 2.5 Ω to -2.5 V in <i>Figure 64</i> .....	22
• Changed V1 value from 2.5 Ω to 2.5 V, changed V2 value from 2.5 Ω to -2.5 V, and changed R <sub>OUT</sub> to R <sub>LOAD</sub> in <i>Figure 66</i> .....	23
• Changed V <sub>OUT</sub> input signal from ±0.35 V <sub>OUT</sub> to ±0.35 V <sub>IN</sub> in <i>Figure 68</i> .....	24
• Changed V1 value from 4.5 Ω to 4.5 V in <i>Figure 70</i> .....	25
• Changed V <sub>EE</sub> to ground in <i>Figure 70</i> .....	25
• Changed V1 value from 3 Ω to 3 V in <i>Figure 72</i> .....	26
• Updated <i>Single-Supply Op Amp Design Techniques</i> application report link in <i>Device Functional Modes</i> section .....	27
• Changed "Cs" and "Cf" to "C <sub>s</sub> " and "C <sub>f</sub> " in <i>Application Information</i> section .....	34
• Updated <i>Transimpedance Considerations for High-Speed Amplifiers</i> application report link in <i>Detailed Design Procedure</i> section.....	35
• Changed EVM guide link in <i>Layout Guidelines</i> section.....	37

The datasheet number will be changing.

Device Family	Change From:	Change To:
OPA838	SBOS867	SBOS867A

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/OPA838>

**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:**

OPA838IDBVR	OPA838IDBVT	OPA838IDCKR	OPA838IDCKT
OPA838SIDCKR	OPA838SIDCKT		

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