12500 TI Boulevard, MS 8640, Dallas, Texas 75243

Notification# 20180223000
Datasheet for OPA838
Information Only

Date: February 26, 2018
To: PREMIER FARNELL 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).

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.

DEVICE	CUSTOMER PART NUMBER
OPA838IDBVT	null
OPA838IDCKT	null

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

PCN Number:	20180223000	PCN Date:	February 26, 2018
Title:	Datasheet for OPA838		
Customer Contact:	PCN Manager	Dept:	Quality Services

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

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.

TEXAS INSTRUMENTS

OPA838

SBOS867A – AUGUST 2017 – REVISED FEBRUARY 2018

Changes from Original (August 2017) to Revision A **Page**

- Added OPA837 to the *Device Comparison* table 4
- Changed *Device Comparison* table note 4
- Changed format of pin names in pinout drawings in *Pin Configuration and Functions* 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 *Pin Configuration and Functions* section 4
- Added table note to table to define pin types in *Pin Configuration and Functions* section 4
- Added table note to *Absolute Maximum Ratings* table 5
- Changed bandwidth for 0.1-dB flatness test condition from V_{OUT} = 2 V_{PP} and G = 10 to V_{OUT} = 200 mV_{PP} and G = 6 in the Electrical Characteristics: V_S = 5 V table 6
- Added values for V_{OH} and V_{OL} parameters at T_A = -40 to +125°C in Electrical Characteristics: V_S = 5 V table 7
- Changed typical bandwidth for 0.1-dB flatness from 5 MHz to 9 MHz in Electrical Characteristics: V_S = 3 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 mV_{PP} and G = 6 in Electrical Characteristics: V_S = 3 V table 8
- Added values for V_{OH} and V_{OL} parameters at T_A = -40 to +125°C in Electrical Characteristics: V_S = 3 V table 9
- Changed V_O test condition from 20 mV to 200 mV in Figure 5 10
- Changed V_O test condition from 20 mV to 200 mV in Figure 6 10
- Changed test conditions from V_{OUT} = 2 V_{PP}, R_F = 0 Ω, G = 1 V/V to R_F = 1 kΩ, R_G = 200 Ω, R_L = 2 kΩ, G = 6 V/V in *Typical Characteristics: V_S = 3 V* section 13
- Changed V_O test condition from 20 mV to 200 mV in Figure 23 13
- Changed V_O test condition from 20 mV to 200 mV in Figure 24 13
- Added condition statement to Typical Characteristics: Over Supply Range 16
- Changed Y-axis label from "Disable and Vo (Bipolar supplies)" to "Disable and V_{OUT} (Bipolar Supplies, Volts)" in Figure 51 17
- Changed Y-axis label from "PD and Output Voltages" to " Disable and V_{OUT} (Bipolar Supplies, Volts)" in Figure 52 17
- Deleted 5-V supply and changed the Y-axis label of Figure 57 18

- Changed specification load value from 1-kΩ to 2-kΩ in *Output Voltage Range* section 21
- Changed first paragraph to correct power down logic in *Power-Down Operation* section 21
- Changed image references in *Power-Down Operation* section 21
- Changed V1 value from 2.5 Ω to 2.5 V in Figure 64 22
- Changed V2 value from 2.5 Ω to –2.5 V in Figure 64 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_{OUT} to R_{LOAD} in Figure 66 23
- Changed V_{OUT} input signal from ±.035 V_{OUT} to ±0.35 V_{IN} in Figure 68 24
- Changed V1 value from 4.5 Ω to 4.5 V in Figure 70 25
- Changed V_{EE} to ground in Figure 70 25
- Changed V1 value from 3 Ω to 3 V in Figure 72 26
- Updated *Single-Supply Op Amp Design Techniques* application report link in *Device Functional Modes* section 27
- Changed "Cs" and "Cf" to "C_S" and "C_F" in *Application Information* section 34
- Updated *Transimpedance Considerations for High-Speed Amplifiers* application report link in *Detailed Design Procedure* section 35
- Changed EVM guide link in *Layout Guidelines* 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		

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