12500 TI Boulevard, MS 8640, Dallas, Texas 75243

Notification# 20170118000
Datasheet for ADS1013, ADS1014, ADS1015
Information Only

Date: February 27, 2017
To: TOKYO ELECTRON DEVICE (DSTR) PCN

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 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
ADS1015IDGST	null
ADS1015IDGSR	null

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

PCN Number:	20170118000	PCN Date:	Feb. 27, 2017
Title:	Datasheet for ADS1013, ADS1014, ADS1015		
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

ADS1013, ADS1014, ADS1015

SBAS473D – MAY 2009 – REVISED DECEMBER 2016

Changes from Revision C (October 2009) to Revision D	Page
• Added *Device Information*, *ESD Ratings*, *Recommended Operating Conditions*, and *Thermal Information* tables, and *Parameter Measurement Information*, *Detailed Description*, *Application and Implementation*, *Power Supply Recommendations*, *Layout*, *Device and Documentation Support*, and sections	1
• Changed *Title*, and *Description*, *Features*, and *Applications* sections for clarity	1
• Deleted temperature range text from *Description* section and moved to *Features* section	1
• Changed *Product Family* table title to *Device Comparison Table* and deleted *Package Designator* column	4
• Changed *Pin Functions* table for clarity	4
• Changed *Power-supply voltage* max value from 5.5 V to 7 V in *Absolute Maximum Ratings* table	5
• Changed *Analog input voltage* from –0.3 V to GND – 0.3 V in *Absolute Maximum Ratings* table	5
• Changed *Digital input voltage* min value from –0.5 V to GND – 0.3 V in *Absolute Maximum Ratings* table	5
• Changed *Digital input voltage* max value from 5.5 V to VDD + 0.3 V in *Absolute Maximum Ratings* table	5
• Deleted *Analog input current* rows in *Absolute Maximum Ratings* table	5
• Added *Input current* row in *Absolute Maximum Ratings* table	5
• Added *Operating temperature* range of –40°C to +125°C back into *Absolute Maximum Ratings* table	5
• Added minimum specification of –40°C for T_J in *Absolute Maximum Ratings* table	5
• Changed *Electrical Characteristics* table conditions line for clarity	6
• Changed all instances of "FS" to "FSR"	6
• Deleted FSR from *Electrical Characteristics* and moved to *Recommended Operating Conditions* table	6
• Added values from Table 2 to *Differential input impedance* parameter in *Electrical Characteristics*	6
• Deleted *Output noise* parameter from *Electrical Characteristics*	6
• Changed *Offset error* empty min value to –0.5, and max value from ±0.5 to 0.5 for clarity in *Electrical Characteristics* table	6
• Changed V_{IH} parameter max value from 5.5 V to VDD in *Electrical Characteristics* table	6
• Changed V_{IL} parameter min value from GND – 0.5 V to GND in *Electrical Characteristics* table	6

- Changed *Input leakage current* parameters from two rows to one row, changed test conditions from V_{IH} = 5.5V and V_{IL} = GND to GND < V_{DIG} < VDD, and changed min value from 10 µA to –10 µA in *Electrical Characteristics* table 6
- Deleted *Power-supply voltage* parameter from *Electrical Characteristics* and moved to *Recommended Operating Conditions* table 6
- Deleted *Specified temperature* parameter from *Electrical Characteristics* and moved to *Recommended Operating Conditions* table 6
- Deleted *Storage temperature* parameter from *Electrical Characteristics* to *Absolute Maximum Ratings* table 6
- Deleted *Operating temperature* parameter from *Temperature* section of *Electrical Characteristics* table 6
- Changed text in note 1 of *Electrical Characteristics* table from "In no event should more than VDD + 0.3 V be applied to this device" to "No more than VDD + 0.3 V or 5.5 V (whichever is smaller) must be applied to this device. See Table 1 for more information." 6
- Added condition statement in *Timing Requirements: I^2C* 7
- Added note 1 to *Timing Requirements* table 7
- Deleted Figure 7, *Noise Plot* 8
- Changed Figure 8; deleted "Gain = 2/3, 1, 2, 4, 8, or 16" from figure 9
- Added *Functional Block Diagrams* for ADS1014 and ADS1013 9
- Changed *Analog Inputs* section to provide LSB size information instead of PGA setting 11
- Changed *Full-Scale Input* section title to *Full-Scale Range (FSR) and LSB Size*, and updated section for clarity 12
- Added *Voltage Reference* and *Oscillator* sections 12
- Changed *Comparator* section title to *Digital Comparator*, and updated section for clarity. 12
- Changed *Conversion Ready Pin* section for clarity 13
- Changed *Register Map* section for clarity 21
- Changed *Application Information* section for clarity 25
- Added *Input Protection* section 26
- Added *Unused Inputs and Outputs* section 26
- Changed *Aliasing* section title to *Analog Input Filtering* and updated section for clarity 27
- Added *Typical Application* section 30

The datasheet number will be changing.

Device Family	Change From:	Change To:
ADS1013, ADS1014, ADS1015	SBAS473C	SBAS473D

These changes may be reviewed at the datasheet links provided.
http://www.ti.com/product/ADS1013

Reason for Change:

To accurately reflect device thermal 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:

ADS1013IDGSR	ADS1013IDGST	ADS1013IRUGR	ADS1013IRUGT
ADS1014IDGSR	ADS1014IDGST	ADS1014IRUGR	ADS1014IRUGT
ADS1015IDGSR	ADS1015IDGST	ADS1015IRUGR	ADS1015IRUGT

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