PCN Number:	20180221002	**PCN Date:**	February 23, 2018
Title:	Datasheet for ADS131A02, ADS131A04		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	May 23, 2018		
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.

TEXAS INSTRUMENTS

ADS131A02, ADS131A04

SBAS590D – MARCH 2016 – REVISED JANUARY 2018

Changes from Revision C (November 2016) to Revision D	Page
• Changed document title from *2- or 4-Channel, 24-Bit, Simultaneously-Sampling, Delta-Sigma ADC* to *2- or 4-Channel, 24-Bit, 128-kSPS, Simultaneous-Sampling, Delta-Sigma ADC*	1
• Changed V_{AVDD} to AVDD, V_{AVSS} to AVSS, V_{GND} to GND, and V_{IOVDD} to IOVDD throughout document	1
• Changed *Features* section	1
• Changed *Description* section	1
• Deleted footnote 2	6
• Changed AVDD, AVSS, VNCP, and XTAL2 pin descriptions and footnote 1 for clarity	6
• Changed *CAP to GND Power supply voltage* parameter specifications from *GND – 0.3 V* to *0.3 V* for the minimum specification and from *GND + 2.0 V* to *2.0 V* for the maximum specification	7
• Changed *Analog input voltage* parameter descriptions from *REFEXT to AVDD* to *REFEXT* and from *REFN input* to AVSS to *REFN*	7
• Changed *Digital input voltage* parameter description to include the names of the digital input pins	7
• Deleted CMRR footnote from *Recommended Operating Conditions* table	8
• Added symbol to *Reference input voltage* parameter	8
• Changed *Offset drift* parameter typical specification from 1.2 µV/°C to 2.5 µV/°C and maximum specification from 3 µV/°C to 4 µV/°C	9
• Changed *Gain drift* parameter typical specification from 0.25 ppm/°C to 0.5 ppm/°C	9
• Deleted separate AVDD PSRR specification for the ADS131A02	9

- Changed *Reference buffer offset* parameter typical specification from 170 µV to 250 µV 9
- Changed *Reference buffer offset drift* parameter typical specification from 1.1 µV/°C to 4 µV/°C and maximum specification from 4.3 µV/°C to 7 µV/°C 9
- Changed *Temperature drift parameter* typical specification from 4 ppm/°C to 6 ppm/°C 10
- Deleted *VNCP* parameter minimum specification and changed typical specification from –1.95 V to –2 V 10
- Changed *Electrical Characteristics* table so all *Power-Supply* subsections are condensed to one *Power-Supply* subsection 10
- Changed *free-air* to *ambient* in condition statements of *Timing Requirements* tables 12
- Changed location of several interface timing parameters to the *Timing Requirements* and *Switching Characteristics* tables from the *Detailed Description* section 12
- Changed unit from *ns* to t_{CLKIN} in $t_{c(SC)}$ and $t_{w(SCHL)}$ rows of *Timing Requirements: Synchronous Master Interface Mode* table 13
- Added $\overline{DRDY}$ *Synchronization Timing for Synchronous Slave Mode (CLKSRC = 0)* to $\overline{RESET}$ *Pin and Command Timing* figures 16
- Changed *Clock* section for clarification and changed setting of XTAL2 pin 26
- Changed *Clock Mode Configurations* figure to include load capacitors for clarity 27
- Changed *Analog Input* section for clarity 28
- Changed *Equivalent Analog Input Circuitry* figure 28
- Changed *Input Overrange and Underrange Detection* section for clarity 30
- Changed location of *Reference* section 30
- Changed *External Reference Driver* figure 31
- Changed *Internal Reference* figure 31
- Changed *Digital Decimation Filter* section for clarity 32
- Deleted figure and table from *Reset (*$\overline{RESET}$*)* section 35
- Changed *Fixed versus Dynamic-Frame Mode* section for clarity 36
- Added *Cyclic Redundancy Check (CRC)* section for clarity 39
- Changed *CRC with CRC_MODE = 0* and *CRC Using the WREGS Command* figures to using red shading instead of *//Zero* 39
- Changed *Data Ready (*$\overline{DRDY}$*)* section for clarity 43
- Changed *pulldown* to *pullup* in bulleted list of *ADC Frame Complete (*$\overline{DONE}$*)* section 47
- Changed description of *UNLOCK from POR or RESET* section 52
- Changed description of *RREG: Read a Single Register* section 52
- Changed *number of registers written plus one (n+1)* to *number of registers written minus one* in *WREGS: Write Multiple Registers* section 54
- Changed *User Register Description* section for clarity 56
- Changed *Unused Inputs and Outputs* section for clarity 67
- Changed title of *Multiple Device Configuration* section and changed description for clarity 68
- Changed first paragraph of *First Device Configured in Asynchronous Interrupt Mode* to condense data from last three paragraphs into one 68
- Changed description of *First Device Configured in Synchronous Master Mode* section to condense all paragraphs into one 70
- Changed description of *All Devices Configured in Synchronous Slave Mode* section to condense all paragraphs into one 72
- Changed *ADS131A0x Configuration Sequence* figure 79
- Changed *GND* to *AVSS* in VNCP pin description of *Negative Charge Pump* section 80
- Changed title of *Internal Digital LDO* section 80
- Changed description of *Power-Supply Sequencing* section 80
- Changed *Bipolar Analog Power Supply* to *Unipolar Analog Power Supply with Negative Charge Pump Enabled* figures 81
- Changed first sentence of *Layout Example* section 83
- Changed *ADS131A0x Layout Example* figure to improve layout 83

The datasheet number will be changing.

Device Family	Change From:	Change To:
ADS131A02, ADS131A04	SBAS590C	SBAS590D

http://www.ti.com/product/ADS131A02
Reason for Change:
To 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:

ADS131A02IPBS	ADS131A02IPBSR	ADS131A04IPBS	ADS131A04IPBSR

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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