12500 TI Boulevard, MS 8640, Dallas, Texas 75243

Notification# 20180809000
Datasheet for ADS7950 - ADS7961
Information Only

Date: August 13, 2018
To: TOKYO ELECTRON DEVICE (DSTR) 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
ADS7951SRGER	null
ADS7952SBRHBR	null
ADS7958SDBT	null
ADS7961SDBT	null
ADS7956SDBT	null
ADS7953SBDBTR	null

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

PCN Number:	20180809000	PCN Date:	August 13, 2018
Title:	Datasheet for ADS7950-ADS7961		
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

ADS7950, ADS7951, ADS7952, ADS7953, ADS7954, ADS7955
ADS7956, ADS7957, ADS7958, ADS7959, ADS7960, ADS7961

SLAS605C – JUNE 2008 – REVISED JULY 2018

Changes from Revision B (July 2015) to Revision C **Page**

- Changed *0 to 2.5 V and 0 to 5 V* to *0 to V_{REF} and 0 to 2 x V_{REF}* in *Input Range* Features bullet 1
- Changed GPIO *Features* bullet 1
- Changed *Optical Line Card Monitoring* and *Multi-Channel, General-Purpose Signal Monitoring* Applications bullets 1
- Changed *(0 V to 2.5 V and 0 V to 5 V)* to *(0 V to V_{REF} and 0 V to 2 × V_{REF})* in *Description* section 1
- Deleted *Companion Products* table 5
- Changed RGE to RHB for two 32-pin VQFN pin diagrams 5
- Added 30-pin DBT package 5
- Changed I/O column of *Pin Functions: TSSOP Packages* table to show full definition instead of abbreviation 6
- Added *active low* to definition of $\overline{CS}$ pin in *Pin Functions: TSSOP Packages* table 7
- Changed pin name and description of Alarm pin in *Pin Functions: TSSOP Packages* table 7
- Added settings to description of Range pin in *Pin Functions: TSSOP Packages* table: added (1) to high and (0) to low 7
- Added *active low* to description of CS pin in *Pin Functions: VQFN Packages* table 8
- Changed pin name and description of Alarm pin in *Pin Functions: VQFN Packages* table 9
- Changed value of *Input current to any pin except supply pins* row from ±10 mA (max) to –10 mA (min) and 10 mA (max) in *Absolute Maximum Ratings* table 10
- Changed *VBD = 1.7 V to 5.25 V* to *VBD = 1.7 V to +VA* in condition statement 12
- Changed minimum specification from –1 LSB to –0.99 LSB in first row of *Differential linearity* parameter 12
- Added *input* to *Reference input resistance* parameter name 13
- Changed maximum specification from *FFC Hex* to *4092 LSB* in *Alarm Setting* parameters 13
- Changed unit from *Numbers* to *Conversion* in *Invalid conversions after power up or reset* parameter 13
- Changed *VBD = 1.7 V to 5.25 V* to *VBD = 1.7 V to +VA* in condition statement 14

- Added *input* to *Reference input resistance* parameter name 14
- Changed maximum specification from *FFC Hex* to *4092 LSB* in *Alarm Setting* parameters 14
- Changed *VBD = 1.7 V to 5.25 V* to *VBD = 1.7 V to +VA* in condition statement 15
- Added *input* to *Reference input resistance* parameter name 16
- Changed maximum specification from *FF Hex* to *255 LSB* in *Alarm Setting* parameters 16
- Changed unit from *Numbers* to *Conversion* in *Invalid conversions after power up or reset* parameter 16
- Changed *REF and GND pins* to *REFP and REFM pins* in the *Reference* section 29
- Added *Example Manual Mode Timing Diagram* figure and corresponding text to *Operating in Manual Mode* section 33
- Added *Example Auto-1 Mode Timing Diagram* figure and corresponding text to the *Operating in Auto-1 Mode* section 35
- Added *Example Auto-2 Mode Timing Diagram* figure and corresponding text to the *Operating in Auto-2 Mode* section 39
- Changed *2.5V* to V_{REF} in first DI06 row and *5V* to $2xV_{REF}$ in second DI06 row 40
- Changed binary code from *0001 1111 1111* to *0011 1111 1111* in Full scale row of *Ideal Input Voltages for 10-Bit Devices and Digital Output Codes for 10-Bit Devices (ADS7954/55/56/57)* table 41
- Changed *10-Bit* to *8-Bit* in title of *Ideal Input Voltages for 8-Bit Devices and Digital Output Codes for 8-Bit Devices (ADS7958/59/60/61)* table 42
- Changed *Application Diagram for an Unbuffered MXO* figure note 48
- Changed *Recommended Layout* figure title to *Recommended Layout for the TSSOP Packaged Device* 52
- Added *Recommended Layout for the VQFN Packaged Device* figure 53

The datasheet number will be changing.

Device Family	Change From:	Change To:
ADS7950-ADS7961	SLAS605B	SLAS605C

These changes may be reviewed at the datasheet links provided.

http://www.ti.com/product/ADS7950

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:

ADS7950SBDBT	ADS7952SBDBT	ADS7954SDBT	ADS7958SRGER
ADS7950SBDBTG4	ADS7952SBDBTG4	ADS7954SDBTR	ADS7958SRGET
ADS7950SBDBTR	ADS7952SBDBTR	ADS7954SRGER	ADS7959SDBT
ADS7950SBRGER	ADS7952SBRHBR	ADS7954SRGET	ADS7959SDBTG4
ADS7950SBRGET	ADS7952SBRHBT	ADS7955SDBT	ADS7959SDBTR
ADS7950SDBT	ADS7952SDBT	ADS7955SDBTG4	ADS7959SRGER
ADS7950SDBTG4	ADS7952SDBTG4	ADS7955SDBTR	ADS7959SRGET
ADS7950SDBTR	ADS7952SDBTR	ADS7955SRGER	ADS7960SDBT
ADS7950SDBTRG4	ADS7952SRHBR	ADS7955SRGET	ADS7960SDBTG4
ADS7950SRGER	ADS7952SRHBT	ADS7956SDBT	ADS7960SDBTR
ADS7950SRGET	ADS7953SBDBT	ADS7956SDBTR	ADS7960SRHBR
ADS7951SBDBT	ADS7953SBDBTG4	ADS7956SRHBR	ADS7960SRHBT
ADS7951SBDBTG4	ADS7953SBDBTR	ADS7956SRHBT	ADS7961SDBT
ADS7951SBDBTR	ADS7953SBRHBR	ADS7957SDBT	ADS7961SDBTG4
ADS7951SBRGER	ADS7953SBRHBT	ADS7957SDBTR	ADS7961SDBTR
ADS7951SBRGET	ADS7953SDBT	ADS7957SRHBR	ADS7961SDBTRG4
ADS7951SDBT	ADS7953SDBTG4	ADS7957SRHBT	ADS7961SRHBR
ADS7951SDBTG4	ADS7953SDBTR	ADS7958SDBT	ADS7961SRHBT

ADS7951SDBTR	ADS7953SRHBR	ADS7958SDBTG4	
ADS7951SRGER	ADS7953SRHBT	ADS7958SDBTR	

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