



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20150204000
Datasheet update for ADS7040/41/42/43/44
Information Only Datasheet

Date: 2/23/2015
To: MOUSER 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 PCN 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

20150204000
Information Only Datasheet
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 |
|---------------|-----------------------------|
| ADS7040IDCUT | null |
| ADS7040IRUGR | null |
| ADS7041IDCUT | null |
| ADS7041IRUGR | null |
| ADS7042IDCUT | null |
| ADS7043IDCUT | null |
| ADS7043IRUGR | null |
| ADS7044IDCUT | null |
| ADS7044IRUGR | null |

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

| | | | | |
|--------------------------|--|-------------------------------------|---------------------|--------------------------|
| PCN Number: | 20150204000 | | PCN Date: | 02/23/2015 |
| Title: | Datasheet update for ADS7040/41/42/43/44 | | | |
| Customer Contact: | PCN Manager | Dept: | Quality Services | |
| Change Type: | | | | |
| <input type="checkbox"/> | Assembly Site | <input type="checkbox"/> | Design | <input type="checkbox"/> |
| <input type="checkbox"/> | Assembly Process | <input checked="" type="checkbox"/> | Data Sheet | <input type="checkbox"/> |
| <input type="checkbox"/> | Assembly Materials | <input type="checkbox"/> | Part number change | <input type="checkbox"/> |
| <input type="checkbox"/> | Mechanical Specification | <input type="checkbox"/> | Test Site | <input type="checkbox"/> |
| <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 | <input type="checkbox"/> |

PCN 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.



ADS7040

SBAS676B –NOVEMBER 2014–REVISED FEBRUARY 2015

www.ti.com

4 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

| Changes from Revision A (November 2014) to Revision B | Page |
|---|------|
| • Changed <i>Wide Operating Range</i> Features bullet: changed the value of AVDD from 1.8 V to 1.65 V | 1 |
| • Changed the wide analog input voltage range value to 1.65 V in first paragraph of <i>Description</i> section | 1 |
| • Changed <i>ESD Ratings</i> table to latest standards | 4 |
| • Changed AVDD parameter minimum specification in <i>Recommended Operating Conditions</i> table to 1.65 V | 4 |
| • Changed AVDD range in conditions of <i>Electrical Characteristics</i> table | 5 |
| • Changed INL and DNL parameter test conditions in <i>Electrical Characteristics</i> table | 5 |
| • Changed maximum throughput rate parameter test conditions in <i>Electrical Characteristics</i> table | 5 |
| • Changed AVDD parameter minimum specification in <i>Electrical Characteristics</i> table | 5 |
| • Changed conditions for <i>Timing Characteristics</i> table: changed range of AVDD and added C _{LOAD} condition | 6 |
| • Changed t _{D_CKDO} parameter in <i>Timing Characteristics</i> table | 6 |
| • Added f _{SCLK} minimum specification to <i>Timing Characteristics</i> table | 6 |
| • Changed titles of Figure 26 to Figure 30 | 10 |
| • Changed <i>Reference</i> sub-section in <i>Feature Description</i> section | 14 |
| • Changed range of second f _{CLK-CAL} parameter description in Table 2 | 19 |
| • Changed range of second f _{CLK-CAL} parameter description in Table 3 | 20 |
| • Changed <i>Reference Circuit</i> section in <i>Application Information</i> | 23 |
| • Added last two sentences to <i>AVDD and DVDD Supply Recommendations</i> section | 29 |

ADS7041

SBAS675B – NOVEMBER 2014 – REVISED FEBRUARY 2015

www.ti.com

4 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

| Changes from Revision A (November 2014) to Revision B | Page |
|---|------|
| • Changed <i>Wide Operating Range Features</i> bullet: changed the value of AVDD from 1.8 V to 1.65 V | 1 |
| • Changed the wide analog input voltage range value to 1.65 V in first paragraph of <i>Description</i> section | 1 |
| • Changed <i>ESD Ratings</i> table to latest standards | 4 |
| • Changed AVDD parameter minimum specification in <i>Recommended Operating Conditions</i> table to 1.65 V | 4 |
| • Changed AVDD range in conditions of <i>Electrical Characteristics</i> table | 5 |
| • Changed INL and DNL parameter test conditions in <i>Electrical Characteristics</i> table | 5 |
| • Changed E _O parameter calibrated test conditions in <i>Electrical Characteristics</i> table | 5 |
| • Changed maximum throughput rate parameter test conditions in <i>Electrical Characteristics</i> table | 5 |
| • Changed AVDD parameter minimum specification in <i>Electrical Characteristics</i> table | 5 |
| • Changed conditions for <i>Timing Characteristics</i> table: changed range of AVDD and added C _{LOAD} condition | 6 |
| • Changed t _{D_CKDO} parameter in <i>Timing Characteristics</i> table | 6 |
| • Added f _{SCLK} minimum specification to <i>Timing Characteristics</i> table | 6 |
| • Changed titles of Figure 26 to Figure 30 | 10 |
| • Changed <i>Reference</i> sub-section in <i>Feature Description</i> section | 14 |
| • Changed range of second f _{CLK-CAL} parameter description in Table 2 | 19 |
| • Changed range of second f _{CLK-CAL} parameter description in Table 3 | 20 |
| • Changed <i>Reference Circuit</i> section in <i>Application Information</i> | 23 |
| • Added last two sentences to <i>AVDD and DVDD Supply Recommendations</i> section | 29 |

ADS7042

SBAS608B – JUNE 2014 – REVISED FEBRUARY 2015

www.ti.com

| Changes from Revision A (August 2014) to Revision B | Page |
|---|------|
| • Added TI Design | 1 |
| • Changed <i>Wide Operating Range Features</i> bullet: changed the value of AVDD from 1.8 V to 1.65 V | 1 |
| • Changed the wide analog input voltage range value to 1.65 V in first paragraph of <i>Description</i> section | 1 |
| • Changed <i>ESD Ratings</i> to latest standards | 4 |
| • Changed AVDD parameter minimum specification in <i>Recommended Operating Conditions</i> table to 1.65 V | 4 |
| • Changed E _O parameter uncalibrated test conditions in <i>Electrical Characteristics</i> table | 5 |
| • Changed Maximum throughput rate parameter test conditions in <i>Electrical Characteristics</i> table | 5 |
| • Changed AVDD parameter minimum specification in <i>Electrical Characteristics</i> table | 6 |
| • Changed conditions for <i>Timing Characteristics</i> table: changed range of AVDD and added C _{LOAD} condition | 7 |
| • Changed t _{D_CKDO} specification in <i>Timing Characteristics</i> table | 7 |
| • Added f _{SCLK} minimum specification to <i>Timing Characteristics</i> table | 7 |
| • Changed titles of Figure 26 to Figure 29 | 11 |
| • Changed <i>Reference</i> section in <i>Feature Description</i> | 15 |
| • Changed range of second f _{CLK-CAL} parameter description in Table 2 | 20 |
| • Changed range of second f _{CLK-CAL} parameter description in Table 3 | 21 |
| • Changed <i>Reference Circuit</i> section in <i>Application Information</i> | 24 |
| • Added last two sentences to <i>AVDD and DVDD Supply Recommendations</i> section | 30 |

ADS7043

SBAS681C –NOVEMBER 2014–REVISED FEBRUARY 2015

www.ti.com

| Changes from Revision B (December 2014) to Revision C | Page |
|--|------|
| • Changed <i>Wide Operating Range</i> Features bullet: changed the value of AVDD from 1.8 V to 1.65 V | 1 |
| • Changed the wide analog input voltage range value to ± 0.825 V in first paragraph of Description section | 1 |
| • Changed AVDD parameter minimum specification in <i>Recommended Operating Conditions</i> table | 4 |
| • Changed E_O parameter uncalibrated test conditions in <i>Electrical Characteristics</i> table | 5 |
| • Changed <i>Maximum throughput rate</i> parameter test conditions in <i>Electrical Characteristics</i> table | 5 |
| • Changed AVDD parameter minimum specification in <i>Electrical Characteristics</i> table | 6 |
| • Changed conditions for <i>Timing Characteristics</i> table: changed range of AVDD and added C_{LOAD} condition | 6 |
| • Changed t_{D_CKDO} specification in <i>Timing Characteristics</i> table | 6 |
| • Added f_{SCLK} minimum specification to <i>Timing Characteristics</i> table | 6 |
| • Changed titles of Figure 26 to Figure 30 | 11 |
| • Changed <i>Reference</i> sub-section in <i>Feature Description</i> section | 15 |
| • Changed AVDD range in description of $f_{CLK-CAL}$ parameter in Table 2 | 20 |
| • Changed AVDD range in description of $f_{CLK-CAL}$ parameter in Table 3 | 21 |
| • Changed <i>Reference Circuit</i> section in <i>Application Information</i> | 24 |
| • Added last two sentences to <i>AVDD and DVDD Supply Recommendations</i> section | 27 |

ADS7044

SBAS682C –NOVEMBER 2014–REVISED FEBRUARY 2015

www.ti.com

| Changes from Revision B (December 2014) to Revision C | Page |
|--|------|
| • Changed <i>Wide Operating Range</i> Features bullet: changed the value of AVDD from 1.8 V to 1.65 V | 1 |
| • Changed the wide analog input voltage range value to ± 1.65 V in first paragraph of Description section | 1 |
| • Changed AVDD parameter minimum specification in <i>Recommended Operating Conditions</i> table | 4 |
| • Changed E_O parameter uncalibrated test conditions in <i>Electrical Characteristics</i> table | 5 |
| • Changed <i>Maximum throughput rate</i> parameter test conditions in <i>Electrical Characteristics</i> table | 5 |
| • Changed AVDD parameter minimum specification in <i>Electrical Characteristics</i> table | 6 |
| • Changed conditions for <i>Timing Characteristics</i> table: changed range of AVDD and added C_{LOAD} condition | 6 |
| • Changed t_{D_CKDO} specification in <i>Timing Characteristics</i> table | 6 |
| • Added f_{SCLK} minimum specification to <i>Timing Characteristics</i> table | 6 |
| • Changed titles of Figure 26 to Figure 30 | 11 |
| • Changed <i>Reference</i> sub-section in <i>Feature Description</i> section | 15 |
| • Changed AVDD range in description of $f_{CLK-CAL}$ parameter in Table 2 | 20 |
| • Changed AVDD range in description of $f_{CLK-CAL}$ parameter in Table 3 | 21 |
| • Changed <i>Reference Circuit</i> section in <i>Application Information</i> | 24 |
| • Added last two sentences to <i>AVDD and DVDD Supply Recommendations</i> section | 28 |

The datasheet number will be changing.

| Device Family | Change From: | Change To: |
|---------------|--------------|-----------------|
| ADS7040 | SBAS676A | SBAS676B |
| ADS7041 | SBAS675A | SBAS675B |
| ADS7042 | SBAS608A | SBAS608B |
| ADS7043 | SBAS681B | SBAS681C |
| ADS7044 | SBAS682B | SBAS682C |

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/ADS7040>

<http://www.ti.com/product/ADS7041>

<http://www.ti.com/product/ADS7042>

<http://www.ti.com/product/ADS7043>

<http://www.ti.com/product/ADS7044>

Reason for Change:

To more 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:

| | | | | |
|--------------|--------------|--------------|--------------|--|
| ADS7040IDCUR | ADS7041IDCUT | ADS7042IRUGR | ADS7044IDCUR | |
| ADS7040IDCUT | ADS7041IRUGR | ADS7043IDCUR | ADS7044IDCUT | |
| ADS7040IRUGR | ADS7042IDCUR | ADS7043IDCUT | ADS7044IRUGR | |
| ADS7041IDCUR | ADS7042IDCUT | ADS7043IRUGR | | |

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 |