



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**PCN# 20150112000**  
**Datasheet update for DS90UB301Q/DS90UH301Q-Q1,**  
**DS90UB925Q/DS90UH925Q-Q1,**  
**Information Only Datasheet**

**Date:** 1/20/2015  
**To:** Newark/Farnell 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](mailto:PCN_ww_admin_team@list.ti.com)).

Sincerely,

PCN Team  
SC Business Services

**20150112000**  
**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.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
DS90UB925QSQE/NOPB	null

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

<b>PCN Number:</b>	20150112000	<b>PCN Date:</b>	01/20/2015
<b>Title:</b>	Datasheet update for DS90UB301Q/DS90UH301Q-Q1,DS90UB925Q/DS90UH925Q-Q1		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Change Type:</b>			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design
<input type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Data Sheet
<input type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site
<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

### PCN Details

#### Description of Change:

The product datasheet(s) is being updated as summarize below.

The following change history provides further details

*TI Confidential — NDA Restrictions*



#### DS90UB301Q-Q1

SNLS409A –JUNE 2012–REVISED OCTOBER 2014

[www.ti.com](http://www.ti.com)

#### Changes from Original (June 2012) to Revision A

Page

• Added data sheet flow and layout to conform with new TI standards. Added the following sections: Handling Ratings, Device Functional Modes; Programming; Power Supply Recommendations; Layout; Device and Documentation Support; Mechanical, Packaging and Ordering Information.....	1
• Added to Absolute Maximum Rating section, note (3): The maximum limit ( $V_{DDIO} + 0.3V$ ) does not apply to the PDB pin during the transition to the power down state (PDB transitioning from HIGH to LOW).....	6
• Deleted derate from Maximum Power Dissipation Capacity at 25°C.....	6
• Added additional thermal characteristics.....	7
• Added typical characteristic graphics.....	13
• Changed Fixed typo for GPIO configuration.....	17
• Deleted 18-bit mode from MODE_SEL table.....	21
• Changed ideal voltages for modes #2 and #3.....	21
• Deleted IDx addresses 0x22, 0x24, 0x2E, 0x30, 0x32, 0x34.....	24
• Changed suggested resistor values for IDx addresses 0x1E, 0x20, 0x26, 0x28, 0x2A.....	24
• Added application graphics of the serializer CML output.....	37



#### DS90UB925Q-Q1

SNLS407D –APRIL 2012–REVISED OCTOBER 2014

[www.ti.com](http://www.ti.com)

#### Changes from Revision C (April 2013) to Revision D

Page

• Added data sheet flow and layout to conform with new TI standards. Added the following sections: Handling Ratings, Device Functional Modes; Programming; Power Supply Recommendations; Layout; Device and Documentation Support; Mechanical, Packaging and Ordering Information.....	1
• Added Device Information table.....	1
• Fixed typo for GPIO configuration.....	19
• Removed two MODE_SEL modes: I2S Channel B, and Backward Compatible.....	23
• Removed IDx addresses 0x22, 0x24, 0x2E, 0x30, 0x32, 0x34.....	26
• Changed suggested resistor values for IDx addresses 0x1E, 0x20, 0x26, 0x28, 0x2A.....	26

**DS90UH925Q-Q1**

SNLS336J–OCTOBER 2010–REVISED NOVEMBER 2014

[www.ti.com](http://www.ti.com)
**Changes from Revision I (April 2013) to Revision J**
**Page**

• Added, updated, or renamed the following sections: Device Information Table, Pin Configuration and Functions, Application and Implementation; Power Supply Recommendations; Layout; Device and Documentation Support; Mechanical, Packaging, and Ordering Information.....	1
• Fixed typo for GPIO configuration .....	17
• Removed two MODE_SEL modes: I2S Channel B, and Backward Compatible.....	22
• Removed IDx addresses 0x22, 0x24, 0x2C, 0x2E, 0x30, 0x32, 0x34 .....	25
• Changed suggested resistor values for IDx addresses 0x1E, 0x20, 0x26, 0x28, 0x2A.....	25

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**DS90UH301Q-Q1**

SNLS424B–OCTOBER 2012–REVISED OCTOBER 2014

[www.ti.com](http://www.ti.com)
**Changes from Revision A (April 2013) to Revision B**
**Page**

• Changed data sheet flow and layout to conform with new TI standards. Added the following sections: Handling Ratings; Device Functional Modes; Programming; Application and Implementation; Power Supply Recommendations; Layout; Device and Documentation Support; Mechanical, Packaging, and Ordering Information .....	1
• Added additional thermal characteristics.....	6
• Added typical characteristic graphics.....	12
• Fixed typo for GPIO configuration .....	16
• Removed 18-bit mode from MODE_SEL table .....	20
• Changed ideal voltages for modes #2 and #3.....	20
• Removed IDx addresses 0x22, 0x24, 0x2C, 0x2E, 0x30, 0x32, 0x34 .....	23
• Changed suggested resistor values for IDx addresses 0x1E, 0x20, 0x26, 0x28, 0x2A.....	23
• Added application graphics of the serializer CML output.....	39

The datasheet number will be changing.

Device Family	Change From:	Change To:
DS90UB301Q-Q1	SNLS409	<b>SNLS409A</b>
DS90UB925Q-Q1	SNLS407C	<b>SNLS407D</b>
DS90UH925Q-Q1	SNLS336I	<b>SNLS336J</b>
DS90UH301Q-Q1	SNLS424A	<b>SNLS424B</b>

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/DS90UB925Q-Q1>
**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:**

DS90UB301QSQ/NOPB	DS90UB925QSQE/NOPB	DS90UH925QSQ/E7002397
DS90UB301QSQE/NOPB	DS90UB925QSQX/E7002826	DS90UH925QSQ/NOPB
DS90UB301QSQX/NOPB	DS90UB925QSQX/NOPB	DS90UH925QSQE/E7002397

DS90UB925QSQ/E7002826	DS90UH301QSQ/NOPB	DS90UH925QSQE/NOPB
DS90UB925QSQ/NOPB	DS90UH301QSQE/NOPB	DS90UH925QSQX/E7002397
DS90UB925QSQE/E7002826	DS90UH301QSQX/NOPB	DS90UH925QSQX/NOPB

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

<b>Location</b>	<b>E-Mail</b>
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>