

<b>Notification Number:</b>	20200602000	<b>Notification Date:</b>	June 10, 2020
<b>Title:</b>	Datasheet for DS90UB940-Q1 and DS90UH940-Q1		
<b>Customer Contact:</b>	<a href="#">Notification Manager</a>	<b>Dept:</b>	Quality Services

### 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.



**DS90UB940-Q1**

SNLS479B –NOVEMBER 2014–REVISED MAY 2020

Changes from Revision A (January 2016) to Revision B	Page
• Updated all pin descriptions to recommend how to connect unused pins. ....	4
• Pin 49 and 64 changed to reserved. These pins may be left as No Connect pin or connected to GND with a 0.1uF cap... ..	8
• Updated MAX VDD33 voltage from 4V to 3.96V in the Absolute Maximum section .....	9
• Updated MAX VDD12 voltage from 1.8V to 1.44V in the Absolute Maximum section .....	9
• Updated MAX VDDIO voltage from 4V to 3.96V in the Absolute Maximum section .....	9
• Updated PDB and BIST_EN MAX voltage from VDDIO+0.3 to 3.96V in the Absolute Maximum section .....	9
• Included Absolute Maximum Open-drain Voltage Spec.....	9
• Included Absolute Maximum CML Output Voltage Spec .....	9
• Included Absolute Maximum CSI-2 Voltage Spec.....	9
• Included Input Capacitance for Strap Pin.....	11
• Updated MIN high level input voltage for PDB and BISTEN at 1.8V IO level.....	11
• Updated MIN high level input voltage for I2C pins at $V_{(VDDIO)} = 1.8\text{ V} \pm 5\% \text{ OR } 3.3\text{ V} \pm 10\%$ .....	11
• Updated MAX input low level voltage for I2C pins at $V_{(VDDIO)} = 1.8\text{ V} \pm 5\% \text{ OR } 3.3\text{ V} \pm 10\%$ .....	11
• Added GPIO9 configuration details .....	26
• Updated recommended MODE_SEL0 resistors to be under 100k ohm to better match available automotive qualified components. ....	39
• Updated recommended MODE_SEL1 resistors to be under 100k ohm to better match available automotive qualified components. ....	39
• Updated recommended IDx resistors to be under 100k ohm to better match available automotive qualified components. ....	43
• Added additional AC cap values for STP and Coax for 92x and 94x devices. ....	87
• Moved <i>Power Sequence</i> to <i>Power Supply Recommendations</i> . Updated <i>Power Sequencing diagram</i> .....	89
• Updated Layout Guidelines section to include ground plane design, FPD-Link III traces and CSI-2 traces routing recommendations. ....	91

Changes from Revision A (January 2016) to Revision B	Page
• Updated all pin descriptions to recommend how to connect unused pins. ....	4
• Pin 49 and 64 changed to reserved. These pins may be left as No Connect pin or connected to GND with a 0.1uF cap... ..	8
• Updated MAX VDD33 voltage from 4V to 3.96V in the Absolute Maximum section .....	9
• Updated MAX VDD12 voltage from 1.8V to 1.44V in the Absolute Maximum section .....	9
• Updated MAX VDDIO voltage from 4V to 3.96V in the Absolute Maximum section .....	9
• Updated PDB and BIST_EN MAX voltage from VDDIO+0.3 to 3.96V in the Absolute Maximum section .....	9
• Included Absolute Maximum Open-drain Voltage Spec.....	9
• Included Absolute Maximum CML Output Voltage Spec .....	9
• Included Absolute Maximum CSI-2 Voltage Spec.....	9
• Included Input Capacitance for Strap Pin.....	11
• Updated MIN high level input voltage for PDB and BISTEN at 1.8V IO level.....	11
• Updated MIN high level input voltage for I2C pins at $V_{(VDDIO)} = 1.8\text{ V} \pm 5\%$ OR $3.3\text{ V} \pm 10\%$ .....	11
• Updated MAX input low level voltage for I2C pins at $V_{(VDDIO)} = 1.8\text{ V} \pm 5\%$ OR $3.3\text{ V} \pm 10\%$ .....	11
• Added GPIO9 configuration details .....	26
• Updated recommended MODE_SEL0 resistors to be under 100k ohm to better match available automotive qualified components. ....	39
• Updated recommended MODE_SEL1 resistors to be under 100k ohm to better match available automotive qualified components. ....	39
• Updated recommended IDx resistors to be under 100k ohm to better match available automotive qualified components. ....	43
• Added additional AC cap values for STP and Coax for 92x and 94x devices. ....	87
• Moved <i>Power Sequence</i> to <i>Power Supply Recommendations</i> . Updated <i>Power Sequencing diagram</i> .....	89
• Updated Layout Guidelines section to include ground plane design, FPD-Link III traces and CSI-2 traces routing recommendations. ....	91

The datasheet number will be changing.

Device Family	Change From:	Change To:
DS90UB940-Q1	SNLS479A	SNLS479B
DS90UH940-Q1	SNLS478A	SNLS478B

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/DS90UB940-Q1>

<http://www.ti.com/product/DS90UH940-Q1>

**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 notification:**

None.

**Product Affected:**

DS90UB940TNKDRQ1	DS90UB940TNKDTQ1	DS90UH940TNKDRQ1	DS90UH940TNKDTQ1
------------------	------------------	------------------	------------------

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>
WW Change Management Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>

### **IMPORTANT NOTICE AND DISCLAIMER**

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property

right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale ([www.ti.com/legal/termsofsale.html](http://www.ti.com/legal/termsofsale.html)) or other applicable terms available either on [ti.com](http://ti.com) or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.