12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20240723008.1
Qualification of AIZU using qualified Process Technology, Die Revision, Datasheet update and additional Assembly Site/BOM options for select devices
Change Notification / Sample Request

Date: July 23, 2024
To: MOUSER PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments (TI). The details of this change are on the following pages, and are in alignment with our standard product change notification (PCN) process.

TI requires acknowledgement of receipt of this notification within 30 days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance and approval of this change. If samples or additional data are required, requests must be received within 30 days of this notification, given that samples are not built ahead of the change.

The Proposed First Ship date in this PCN letter is the earliest possible date that customers could receive the changed material. It is our commitment that the changed device will not ship before that date. If samples are requested within the 30 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

This particular PCN is related to TI's multiyear transition plan for our two remaining factories with 150-millimeter production (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). DFAB will remain open, but will focus on 200-mm production, with a smaller set of technologies. SFAB will close no earlier than 2024 and no later than 2025. As referenced in the "reason for change" below, these changes are part of our multiyear plan to transition these products to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the Change Management team. For sample requests or sample related questions, contact your local Field Sales Representative. As always, we thank you for your continued business.

Change Management Team
SC Business Services

20240723008.1
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
UCC27200ADDAR	NULL
UCC27200ADR	NULL
UCC27200ADRMR	NULL
UCC27200DDAR	NULL
UCC27200DR	NULL
UCC27201ADDAR	NULL
UCC27201ADPRR	NULL
UCC27201ADR	NULL
UCC27201ADRCR	NULL
UCC27201ADRMR	NULL
UCC27201DDAR	NULL
UCC27201DR	NULL
UCC27201DRMR	NULL
UCC27211ADRMR	NULL
UCC27211DDAR	NULL
UCC27211DPRR	NULL
UCC27211DR	NULL
UCC27211DRMR	NULL
UCC27212DPRR	NULL

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

PCN Number:	20240723008.1	PCN Date:	July 23, 2024
Title:	Qualification of AIZU using qualified Process Technology, Die Revision, Datasheet update and additional Assembly Site/BOM options for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	October 21, 2024	Sample requests accepted until:	August 22, 2024*

***Sample requests received after August 22, 2024 will not be supported.**

Change Type:

☒	Assembly Site	☒	Design	☐	Wafer Bump Material
☒	Assembly Process	☒	Data Sheet	☐	Wafer Bump Process
☒	Assembly Materials	☐	Part number change	☒	Wafer Fab Site
☐	Mechanical Specification	☐	Test Site	☐	Wafer Fab Material
☒	Packing/Shipping/Labeling	☐	Test Process	☒	Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of its AIZU fabrication facility as an additional Wafer Fab option in addition to Assembly site/BOM options for the devices listed below.

Current Fab Site			Additional Fab Site		
Current Fab Site	**Process**	**Wafer Diameter**	**Additional Fab Site**	**Process**	**Wafer Diameter**
DFAB	LBCSOI	200 mm	AIZU	LBCSOI2	200 mm

The die was also changed as a result of the process change.

Construction differences are as follows:

Group 1:

	ASESH	FMX
Wire diam/type	1.3mil Au	0.96mil Cu
Mount compound	EY1000063	4147858
Mold compound	EN2000509	4211880
Package marking	Pin1 stripe, with G4	Pin 1 dot, no G4

Group 2:

	Current	Proposed
Wire diam/type	1.3mil Cu	0.96mil Cu

Group 3:

	TI Clark	TI CDAT
Wire diam/type	1.3mil Cu	0.96mil Cu

Group 4:

	UTL	TI CDAT
Wire diam/type	1.3mil Cu	0.96mil Cu
Mount compound	PZ0031	4207123
Mold compound	CZ0142	4222198

The datasheets will be changing as a result of the above mentioned changes. The datasheet change details can be reviewed in the datasheet revision history. The links to the revised datasheets are available in the table below.

Changes from Revision F (November 2014) to Revision G (July 2024) **Page**

- Changed document title to reflect key features of the device. 1
- Updated several specifications to reflect the device characteristics....1
- Deleted all references to UCC27210 since device is obsolete....1
- Changed Features section: 1) Changed junction temperature range specification from -40°C to 140°C to -40°C to 150°C. 2) Changed peak currents to reflect specification, no change in actual drive strength (from 4A/4A to 3.7A/4.5A. 3) Deleted 0.9-Ω Pullup and Pulldown Resistance since it is not specified in the Electrical Characteristics. 4) Deleted Pseudo-CMOS Compatible Input which is not a feature of the UCC27211A device. 5) Changed typical specifications mentioned for delay matching and propagation delay to reflect the information in the Electrical Characteristics table: from 2-ns delay matching, 18-ns propagation delay to 4-ns delay matching, 20-ns propagation delay. 1
- Updated Applications section with list of top 5 typical applications....1
- Changed Description section: 1) Changed peak current to display typical pull-up/pull-down, no change in actual specification - from 4A4/A to 3.7A/4.5A. 2) Deleted pullup/pulldown resistance information since this is not an actual specification in the Electrical Characteristics table. 3) Changed HS transient tolerance to match the specification in the Absolute Maximum table - from -18V to -(VDD-24)V. 4) Changed delay matching to match specification in the Electrical Characteristics table - from 2ns to 4ns. 1
- Updated Absolute Maximum Ratings section to remove "Lead temperature (soldering, 10s)". 5
- Updated Recommended Operating Conditions: Operating Junction Temperature maximum changed from 140°C to 150°C....5
- Updated Thermal Information section to reflect device characteristics. 5
- Removed specifications with test condition "DDA only" since all specifications apply to all package variants..5
- Removed specifications for UCC27210. 5
- Updated Supply Currents specifications in the Electrical Characteristics table: 1) I_{DD} minimum specification removed. 2) I_{DD} typical changed (From: 0.085mA. To: 0.11mA). 3) I_{DDO} typical changed (From: 2.5mA. To: 1.4mA). 4) I_{DDO} maximum changed (From: 5.2mA. To: 3mA. 5) I_{HB} minimum specification removed. 6) I_{HBO} typical changed (From: 2.5mA. To: 1.3mA). 7) I_{HBO} maximum changed (From: 5mA. To: 3mA). 8) I_{HBS} test condition changed to match V_{HS} maximum recommended operating conditions (From: 115V. To: 105V). 9) I_{HBSO} typical changed (From: 0.07mA. To: 0.03mA). 10) I_{HBSO} maximum changed (From: 1.2mA. To: 1mA). .5
- Updated Input specifications in the Electrical Characteristics table: UCC27211 V_{LIT} minimum changed (From: 1.3V. To: 1.2V). 5
- Updated Bootstrap diode specifications in the Electrical Characteristics table: 1) V_F maximum changed (From: 0.8V. To: 0.85V). 2) V_{FI} typical changed (From: 0.85V. To: 0.9V), and maximum changed (From: 0.95V. To: 1.05V). 3) R_D test conditions changed (From: 100mA and 80mA. To: 180mA and 160mA). 4) R_D typical changed (From: 0.5Ω. To: 0.55Ω). 5
- Updated LO/HO Gate Driver specifications in the Electrical Characteristics table: 1) Minimum specification removed for V_{LOL}, V_{LOH}, V_{HOL}, V_{HOH}. 2) V_{LOL} and V_{HOL} typical changed (From 0.09V. To 0.07V). 3) V_{LOH} and V_{HOH} typical changed (From: 0.16V. To: 0.11V)....5
- Updated Switching Characteristics - Propagation Delays table: 1) Changed T_{DLFF} and T_{DHFF} typicals (From: 17ns. To: 19ns). 2) Changed T_{DLRR} and T_{DHRR} typicals (From: 18ns. To: 20ns). 5
- Updated Switching Characteristics - Delay Matching table: 1) Changed T_{MON} and T_{MOFF} typicals (From: 2ns. To: 4ns). 2) Changed T_{MON} and T_{MOFF} across temperature maximum (From: 14ns. To: 17ns)....5
- Updated Switching Characteristis - Output Rise and Fall Time table: 1) t_R typical changed (From: 0.36us. To: 0.27us). 2) t_F typical changed (From: 0.15us. To: 0.16us). 5
- Updated Switching Characteristics - Miscellaneous table: t_{IN_PW} maximum changed (From: 50ns. To: 40ns)..5
- Updated all plots in Typical Characteristics section to reflect the typical specification of the device. 9
- Updated Input Stages section to match the input pulldown resistance typical specification in the Electrical Characteristics table, changed from 70kΩ to 68kΩ. Changed input capacitance from 2pF to 4pF. 13
- Changed application curves to display propagation delay and rise/fall time plots. 19

Changes from Revision A (April 2018) to Revision B (July 2024) **Page**

- Changed document title to reflect the device's key features. 1
- Changed several specifications to reflect the device characteristics..... 1
- Changed Features section: 1) Changed sink/source current to use exact typical specification, no change in actual device specification (From: 4-A/4-A To: 3.7-A/4.5-A). 2) Changed T_J to match improved device specification (From: Specified from -40°C to +140°C. To: Specified from -40°C to +150°C junction temperature range). 1
- Updated Applications section with list of top 5 typical applications..... 1
- Changed Description section: 1) Changed peak currents (From: 4-A source and 4-A sink. To: 3.7A source and 4.5A sink). 2) Changed 5-V turn-off UVLO (From: 5-V UVLO. To: 5-V turn-off UVLO). 3) Changed format for package name from WSON (10) to DPR (WSON, 10). 4) Changed HS pin tolerance to reflect specification in Electrical Characteristics table (From: -18V. To: -(24V-VDD)). 5) Updated propagation delay plot. 1
- Updated Pin Functions table to remove DDA and DRM packages, since UCC27212 is only available in DPR package..... 3
- Updated Recommended Operating Conditions: Operating Junction Temperature maximum changed from 140°C to 150°C..... 4
- Updated Thermal Information section to reflect device characteristics. 4
- Updated Electrical Characteristics and Switching Characteristics tables to remove specifications for 6.8V VDD, leaving the specifications for 12V VDD test condtion, as typically done in gate driver datasheets. 4
- Updated Supply Currents specifications in the Electrical Characteristics table: 1) Minimum specification removed for I_{DD}, I_{DDO}, I_{HB} and I_{HBO}. 2) I_{DD} typical changed (From: 0.085mA. To: 0.11mA). 3) I_{DDO} typical changed (From: 2.5mA. To: 1.4mA). 4) I_{DDO} maximum changed (From: 6.5mA. To: 3mA). 5) I_{HBO} typical changed (From: 2.5mA. To: 1.3mA). 6) I_{HBO} maximum changed (From: 5.1mA. To: 3mA). 8) I_{HBS} test condition changed to match V_{HS} maximum recommended operating conditions (From: 115V. To: 100V). 9) I_{HBSO} typical changed (From: 0.07mA. To: 0.03mA). 10) I_{HBSO} maximum changed (From: 1.2mA. To: 1mA). . 4
- Updated Bootstrap diode specifications in the Electrical Characteristics table: 1) V_F maximum changed (From: 0.8V. To: 0.85V). 2) V_{FI} typical changed (From: 0.85V. To: 0.9V), and maximum changed (From: 0.95V. To: 1.05V). 3) R_D test conditions changed (From: 100mA and 80mA. To: 180mA and 160mA). 4) R_D typical changed (From: 0.5Ω. To: 0.55Ω). 4
- Updated LO/HO Gate Driver specifications in the Electrical Characteristics table: 1) Minimum specification removed for V_{LOL}, V_{LOH}, V_{HOL}, V_{HOH}. 2) V_{LOL} and V_{HOL} typical changed (From 0.1V. To 0.07V). 3) V_{LOH} and V_{HOH} typical changed (From: 0.16V. To: 0.11V)..... 4
- Updated Propagation Delays specifications in the Switching Characteristics table: 1) Changed T_{DLFF} and T_{DHFF} typicals (From: 16ns. To: 19ns). Updated Output Rise and Fall Time specifications in the Switching Characteristis table: 1) t_R with 1000pF C_{LOAD} changed (From: 7.8ns typical. To: 7.2ns typical). 2) t_F with 1000pF C_{LOAD} changed (From: 6ns typical. To: 5.5ns typical). 3) t_R with 1uF C_{LOAD} changed (From: 0.36us typical. To: 0.27us typical). 4) t_F with 0.1uF C_{LOAD} changed (From: 0.20us typical. To: 0.16us typical). 4
- Updated Miscellaneous specifications in the Switching Characteristics table: t_{IN_PW} maximum changed (From: 100ns. To: 40ns)..... 4
- Updated all plots in Typical Characteristics section to reflect the typical specification of the device. 8
- Changed typical specifications mentioned in the Overview section to match the device specifications in the Electrical Characteristics table..... 11
- Changed Input Stages section to match the input pulldown resistance typical specification in the electrical characteristics table (From: 70kΩ. To: 68kΩ). 12
- Changed Undervoltage Lockout (UVLO) section to VHB UVLO hysteresis to match electrical characteristics table (From: 0.4V. To: 0.3V)..... 12
- Changed application curves to display propagation delay and rise/fall time plots. 17

Changes from Revision C (April 2016) to Revision D (July 2024) **Page**

- Changed document title to reflect the device's key features. Updated several specifications to reflect the device characteristics. 1
- Updated the numbering format for tables, figures, and cross-references throughout the document..... 1
- Changed Features section: 1) Changed junction temperature range specification From: -40°C to 140°C. To: -40°C to 150°C. 2) Changed typical propagation delay From: 20ns. To: 22ns. 3) Deleted Greater than 1 MHz of Operation since the switching frequency is not a specified parameter. 4) Changed typical bootstrap diode resistance From: 0.6Ω. To: 0.65Ω..... 1
- Updated Applications section with list of top 5 typical applications..... 1
- Updated Absolute Maximum Ratings section to remove "Power dissipation at TA = 25°C" and "Lead temperature (soldering, 10s)". Power dissipation can be calculated with thermal metrics in "Thermal Information" table..... 4
- Updated Recommended Operating Conditions: Operating Junction Temperature maximum changed from 140°C to 150°C..... 4
- Updated Thermal Information section to reflect device characteristics. 4
- Updated Supply Currents specifications in the Electrical Characteristics table: 1) I_{DD} typical changed (From: 0.4mA. To: 0.11mA). 2) I_{DDO} typical changed (From: 2.5mA for UCC27200 and 3.8mA for UCC27201. To: 1mA for both). 3) I_{DDO} maximum changed (From: 4mA for UC27200 and 5.5mA for UCC27201. To: 3mA for both. 4) I_{HB} typical changed (From: 0.4mA. To: 0.065mA). 5) I_{HBO} typical changed (From: 2.5mA. To: 0.9mA). 6) I_{HBO} maximum changed (From: 4mA. To: 3mA). 7) I_{HBS} test condition changed to match V_{HS} maximum recommended operating conditions (From: 110V. To: 105V). 8) I_{HBSO} typical changed (From: 0.1mA. To: 0.03mA)..... 4
- Updated Input specifications in the Electrical Characteristics table: 1) UCC27200 V_{HIT} typical changed (From: 5.8V. To: 6V). 2) UCC27200 V_{LIT} typical changed (From: 5.4V. To: 5.6V). 3) UCC27201 V_{HIT} specifications changed (From: 1.7V typical, 2.5V maximum. To: 1.9V minimum, 2.3V typical, 2.7V maximum). 4) UCC27201 V_{LIT} specifications changed (From: 0.8V minimum, 1.6V typical. To: 1.3V minimum, 1.6V typical, 1.9V maximum). 5) UCC27201 V_{IHYS} typical changed (From: 100mV. To: 700mV). 6) UCC27201 R_{IN} specifications changed from (100kΩ minimum, 200kΩ typical, 350kΩ maximum. To: 68kΩ typical). 4
- Updated Bootstrap diode specifications in the Electrical Characteristics table: 1) R_D test conditions changed (From: 100mA and 80mA. To: 120mA and 100mA). 2) R_D typical changed (From: 0.6Ω. To: 0.65Ω). 4
- Updated LO/HO Gate Driver specifications in the Electrical Characteristics table: 1) V_{LOL} typical changed (From 0.18V. To 0.1V). 2) V_{LOH} typical changed (From: 0.25V. To: 0.13V). 4
- Removed specifications with test conditions "-40°C to 125°C T_J", since all parameters are specified from -40°C to 150°C T_J (unless otherwise noted). 4
- Changed Propagation Delays typical specification (From: 20ns. To: 22ns)..... 4
- Updated Output Rise and Fall Time specifications: 1) t_R typical changed (From: 0.35us. To: 0.26us). 2) t_F typical changed (From: 0.3us. To: 0.22us). 4
- Updated all plots in Typical Characteristics section to reflect the device's typical specification. 8
- Updated Input Stages section. 1) Changed UCC27201A input pulldown resistance typical to match the specification in the electrical characteristics table (From: 70kΩ. To: 68kΩ). 2) Changed input capacitance From: 2pF To: 4pF. 3) Changed UCC27200A input thresholds to 6V and 5.6V to reflect the specification in the electrical characteristics table (From: 48% and 45% of VDD. To: 6V and 5.6V)..... 11
- Updated Typical Application section to display a different application diagram and detailed design procedure since information in legacy datasheet had an outdated circuit with obsolete part numbers. 13
- Changed application curves to display propagation delay and rise/fall time plots. 17
- Updated Power Supply Recommendations section to fix 3 typos..... 18

Changes from Revision B (August 2015) to Revision C (July 2024) **Page**

- Changed document title to reflect key features of the device. 1
- Updated several specifications to reflect device characteristics. 1
- Updated Features section: 1) Changed junction temperature range specification from -40°C to 140°C to -40°C to 150°C. 2) Changed typical propagation delay from 20ns to 22ns. 3) Deleted Greater than 1MHz of Operation since the switching frequency is not a specified parameter. 4) Changed typical bootstrap diode resistance from 0.6Ω to 0.65Ω....1
- Updated Applications section with list of top 5 typical applications....1
- Deleted any reference to UCC27200A in DRC package in this data sheet since this package variant is obsolete. 1
- Updated Pin Configuration and Functions section pin diagrams and pin description to indicate that the PowerPAD is internally connected to the VSS pin on the DRC package only. 3
- Updated Absolute Maximum Ratings section to remove "Power dissipation at TA = 25°C" and "Lead temperature (soldering, 10s)". Power dissipation can be calculated with thermal metrics in "Thermal Information" table....5
- Updated Recommended Operating Conditions: Operating Junction Temperature maximum changed from 140°C to 150°C....5
- Updated Thermal Information section to reflect device characteristics. 5
- Updated Supply Currents specifications in the Electrical Characteristics table: 1) I_{DD} typical changed (From: 0.4mA. To: 0.11mA). 2) I_{DDO} typical changed (From: 2.5mA for UCC27200 and 3.8mA for UCC27201. To: 1mA for both). 3) I_{DDO} maximum changed (From: 4mA for UC27200 and 5.5mA for UCC27201. To: 3mA for both. 4) I_{HB} typical changed (From: 0.4mA. To: 0.065mA). 5) I_{HBO} typical changed (From: 2.5mA. To: 0.9mA). 6) I_{HBO} maximum changed (From: 4mA. To: 3mA). 7) I_{HBS} test condition changed to match V_{HS} maximum recommended operating conditions (From: 110V. To: 105V). 8) I_{HBSO} typical changed (From: 0.1mA. To: 0.03mA)....5
- Updated Input specifications in the Electrical Characteristics table: 1) UCC27200 V_{HIT} typical changed (From: 5.8V. To: 6V). 2) UCC27200 V_{LIT} typical changed (From: 5.4V. To: 5.6V). 3) UCC27201 V_{HIT} specifications changed (From: 1.7V typical, 2.5V maximum. To: 1.9V minimum, 2.3V typical, 2.7V maximum). 4) UCC27201 V_{LIT} specifications changed (From: 0.8V minimum, 1.6V typical. To: 1.3V minimum, 1.6V typical, 1.9V maximum). 5) UCC27201 V_{IHYS} typical changed (From: 100mV. To: 700mV). 6) UCC27201 R_{IN} specifications changed from (100kΩ minimum, 200kΩ typical, 350kΩ maximum. To: 68kΩ typical). 5
- Updated Bootstrap diode specifications in the Electrical Characteristics table: 1) R_D test conditions changed (From: 100mA and 80mA. To: 120mA and 100mA). 2) R_D typical changed (From: 0.6Ω. To: 0.65Ω). 5
- Updated LO/HO Gate Driver specifications in the Electrical Characteristics table: 1) V_{LOL} typical changed (From 0.18V. To 0.1V). 2) V_{LOH} typical changed (From: 0.25V. To: 0.13V). 5
- Removed specifications with test conditions "-40°C to 125°C T_J", since all parameters are specified from -40°C to 150°C T_J (unless otherwise noted). 5
- Changed Propagation Delays typical specification (From: 20ns. To: 22ns)....5
- Updated all plots in Typical Characteristics section to reflect the device's typical specification. 9
- Updated Input Stages section: 1) Changed UCC27201A input pulldown resistance typical to match the specification in the Electrical Characteristics table from 70kΩ to 68kΩ. 2) Changed input capacitance from 2pF to 4pF. 3) Changed UCC27200A input thresholds from 48% and 45% of VDD to 6V and 5.6V to reflect the specification in the Electrical Characteristics table....12
- Updated Typical Application section to display a different application diagram and Detailed Design Procedure section since information in legacy data sheet had an outdated circuit with obsolete part numbers. 14
- Changed application curves to display propagation delay and rise/fall time plots. 17

Changes from Revision C (October 2015) to Revision D (July 2024) **Page**

- Changed document title to reflect the device's key features. 1
- Changed several specifications to reflect the device characteristics..... 1
- Removed 8-pin SOIC and 10-pin SON packages from the data sheet 1
- Changed Features section: 1) Changed junction temperature range specification (From: -40°C to 140°C. To: -40°C to 150°C). 2) Deleted HBM and CDM classification levels, no change in ratings in the ESD table. 3) Changed peak currents to reflect specification, no change in actual drive strength (From: 4A/4A. To: 3.7A/ 4.5A). 4) Deleted 0.9-Ω Pullup and Pulldown Resistance since it is not specified in the Electrical Characteristics. 5) Deleted Pseudo-CMOS Compatible Input which is not a feature of UCC27211A device.... 1
- Updated Applications section with list of top 5 typical applications..... 1
- Changed in Description section: 1) Added new D (SOIC, 8) package variant. 2) Changed peak current to display typical pull-up/pull-down, no chang in actual specification (From: 4A4/A. To: 3.7A/4.5A). 3) Deleted pullup/pulldown resistance information since this is not an actual specification in the electrical charactersitics table. 4) Updated propagation delay plot with new data. 5) Changed HS transient tolerance to match the specification in the Absolute Maximum table (From: -18V. To: -(24-VDD)V. 1
- Changed the VSON pinout view from top to bottom 3
- Updated Recommended Operating Conditions: Operating Junction Temperature maximum changed from 140°C to 150°C..... 4
- Updated Thermal Information section to reflect device characteristics. 4
- Updated Supply Currents specifications in the Electrical Characteristics table: 1) Minimum specification removed for I_{DD}, I_{DDO}, I_{HB} and I_{HBO}. 2) I_{DD} typical changed (From: 0.085mA. To: 0.11mA). 3) I_{DDO} typical changed (From: 2.6mA. To: 1.4mA). 4) I_{DDO} maximum changed (From: 6.5mA. To: 3mA. 5) I_{HBO} typical changed (From: 2.5mA. To: 1.3mA). 6) I_{HBO} maximum changed (From: 5.1mA. To: 3mA). 8) I_{HBS} test condition changed to match V_{HS} maximum recommended operating conditions (From: 115V. To: 105V). 9) I_{HBSO} typical changed (From: 0.07mA. To: 0.03mA). 10) I_{HBSO} maximum changed (From: 1.2mA. To: 1mA). . 4
- Updated Input specifications in the Electrical Characteristics table: 1) V_{HIT} minimum changed (From: 1.9V. To: 1.7V). 2) V_{LIT} minimum changed (From: 1.3V. To: 1.2V). 4
- Updated Bootstrap diode specifications in the Electrical Characteristics table: 1) V_F maximum changed (From: 0.8V. To: 0.85V). 2) V_{FI} typical changed (From: 0.85V. To: 0.9V), and maximum changed (From: 0.95V. To: 1.05V). 3) R_D test conditions changed (From: 100mA and 80mA. To: 180mA and 160mA). 4) R_D typical changed (From: 0.5Ω. To: 0.55Ω). 4
- Updated LO/HO Gate Driver specifications in the Electrical Characteristics table: 1) Minimum specification removed for V_{LOL}, V_{LOH}, V_{HOL}, V_{HOH}. 2) V_{LOL} and V_{HOL} typical changed (From 0.1V. To 0.07V). 3) V_{LOH} and V_{HOH} typical changed (From: 0.16V. To: 0.11V)..... 4
- Updated Switching Characteristics - Propagation Delays table: 1) Changed T_{DLFF} and T_{DHFF} typicals (From: 16ns. To: 19ns). 4
- Updated Switching Characteristis - Output Rise and Fall Time table: 1) t_R typical changed (From: 0.36us. To: 0.27us). 2) t_F typical changed (From: 0.15us. To: 0.16us). 4
- Updated Switching Characteristics - Miscellaneous table: t_{IN_PW} maximum changed (From: 50ns. To: 40ns).. 4
- Updated all plots in Typical Characteristics section to reflect the typical specification of the device. 8
- Changed typical specifications listed in the Overview section to match the device specifications in the Electrical Characteristics table..... 11
- Changed Input Stages section to match the input pulldown resistance typical specification in the electrical characteristics table (From: 70kΩ. To: 68kΩ). 12
- Changed application curves to display propagation delay and rise/fall time plots. 18

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
UCC27211	SLUSAT7F	**SLUSAT7G**	http://www.ti.com/product/UCC27211
UCC27212	SLUSCO1A	**SLUSCO1B**	http://www.ti.com/product/UCC27212
UCC2720x	SLUS746C	**SLUS746D**	http://www.ti.com/product/UCC27200
UCC2720xA	SLUSAF9B	**SLUSAF9C**	http://www.ti.com/product/UCC27200A
UCC27211A	SLUSBL4C	**SLUSBL4D**	http://www.ti.com/product/UCC27211A

Qual details are provided in the Qual Data Section.

Reason for Change:

These changes are part of our multiyear plan to transition products from our 150-millimeter factories to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

None

Impact on Environmental Ratings:

Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

RoHS	REACH	Green Status	IEC 62474
☒ No Change	☒ No Change	☒ No Change	☒ No Change

Changes to product identification resulting from this PCN:

Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
DL-LIN	DLN	USA	Dallas
AIZU	**CU2**	**JPN**	**Aizuwakamatsu-shi**

Die Rev:

Current	New
Die Rev [2P]	**Die Rev [2P]**
A, C, D	**A**

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
UTL	NSE	THA	Bangkok
TI CLARK	QAB	PHL	Angeles City, Pampanga
ASESH	ASH	CHN	Shanghai
TI Mexico	**MEX**	**MEX**	**Aguascalientes**
CDAT	**CDA**	**CHN**	**Chengdu**

Sample product shipping label (not actual product label):

Product Affected:

Group 1 Device List:

UCC27200ADDAR	UCC27201ADDAR	UCC27201DDAR	UCC27211DDAR
UCC27200DDAR			

Group 2 Device List:

UCC27200ADR	UCC27201ADR	UCC27201DR	UCC27211DR
UCC27200DR			

Group 3 Device List:

UCC27201ADRCR	UCC27201ADPRR	UCC27211DPRR	UCC27212DPRR

Group 4 Device List:

UCC27200ADRMR	UCC27201ADRMR	UCC27211ADRMR
UCC27200DRMR	UCC27201DRMR	UCC27211DRMR

For alternate parts with similar or improved performance, please visit the product page on TI.com

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	#	Test Name	Condition	Duration	Qual Device: UCC27301ADR	QBS Reference: UCC27301AQDDARQ1	QBS Reference: TCAN1043ADRQ1
HAST	A3	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	3/231/0	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	3/231/0
TC	A4	Temp Cycle	-65C/150C	500 Cycles	-	3/231/0	3/231/0
HTSL	A4	High Temp Storage	150C	1000 Hours	-	3/135/0	3/135/0
HTOL	B1	Life Test	125C	1000 Hours	-	-	1/77/0

Type	#	Test Name	Condition	Duration	Qual Device: UCC27301ADR	QBS Reference: UCC27301AQDDARQ1	QBS Reference: TCAN1043ADRQ1
HTOL	B1	Life Test	150C	300 Hours	-	3/231/0	-
ELFR	B2	Early Life Failure Rate	150C	24 Hours	-	3/2400/0	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	1/15/0	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	3/30/0	3/30/0
ESD	E2	ESD CDM	-	500 Volts	-	1/3/0	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	-	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	1/6/0	1/6/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	3/90/0	3/90/0

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours
- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: http://www.ti.com/

TI Qualification ID: R-NPD-2403-170

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	#	Test Name	Condition	Duration	Qual Device: UCC27301AQDRCRQ1	Qual Device: UCC27311AQDRCRQ1	QBS Reference: TLC69601QRTWRQ1	QBS Reference: UCC27301AQDDARQ1	QBS Reference: LP8868ZQDMTRQ1	QBS Reference: LM5149QRGYRQ1	QBS Reference: LM5149RGYR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	3/231/0	1/77/0	1/77/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	1/77/0	-	-	3/231/0	-	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	3/231/0	-	1/77/0	-	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	-	3/231/0	3/231/0	1/77/0	1/77/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	3/135/0	3/135/0	1/45/0	-	3/135/0
HTOL	B1	Life Test	125C	1000 Hours	-	-	1/77/0	-	1/77/0	-	-
HTOL	B1	Life Test	150C	300 Hours	-	-	-	3/231/0	-	1/77/0	3/231/0
ELFR	B2	Early Life Failure Rate	150C	24 Hours	-	-	-	3/2400/0	-	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0	-	-	-
PD	C4	Physical Dimensions	Cpk>1.67	-	1/10/0	-	3/30/0	3/30/0	1/10/0	-	3/30/0
ESD	E2	ESD CDM	-	500 Volts	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0

Type	#	Test Name	Condition	Duration	Qual Device: UCC27301AQDRCRQ1	Qual Device: UCC27311AQDRCRQ1	QBS Reference: TLC69601QRTWRQ1	QBS Reference: UCC27301AQDDARQ1	QBS Reference: LP8868ZQDMTRQ1	QBS Reference: LM5149QRGYRQ1	QBS Reference: LM5149RGYR
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/6/0	1/6/0	1/6/0	1/6/0	1/6/0	1/6/0	1/6/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	1/30/0	-	3/90/0	3/90/0	1/30/0	3/90/0	3/90/0

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours
- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: http://www.ti.com/

TI Qualification ID: R-NPD-2303-050

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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