PCN Number:	20160323001	**PCN Date:**	03/23/2016
Title:	HD3SS3412RUAR/T Die Revision Change		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	06/23/2016	**Estimated Sample Availability:**	Date provided at sample request.
Change Type:			

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

PCN Details

Description of Change:

This notification is to inform of a die revision change to select devices. Design changes were made to improve the power performance in the device. The power improvements are achieved through design optimization of bias circuits, charge pump and adaptive common mode voltage regulator. There is no change to the device functionality. The high speed switch network remained unchanged. The design changes do not affect the device's guaranteed datasheet specifications or electrical performance.

Affected devices are listed in the product affected section of this document.

Reason for Change:

Improved product performance

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

None

Changes to product identification resulting from this PCN:

Die Rev designator will change as shown in the table and sample label below:

Current	New
Die Rev [2P]	**Die Rev [2P]**
B	-

Sample product shipping label (not actual product label)

Product Affected:

HD3SS3412RUAR	HD3SS3412RUAT

Qualification Report

HD3SS3412RUA Die Rev D
Approve Date 16-Mar-2016

Product Attributes

Attributes	Qual Device: HD3SS3412RUA _REV1	Qual Device: HD3SS3412RUA _REV0	QBS Process Reference: HD3SS3411TRWA Q1	QBS Package Reference: AMC7823IRTA.	QBS Package Reference: SH6966ACC0RGCR G4 _CU_WIRE
Assembly Site	CLARK-AT	CLARK-AT	CLARK-AT	CLARK-AT	CLARK-AT
Package Family	QFN	QFN	QFN	QFN	QFN
Wafer Fab Supplier	FFAB	FFAB	FFAB	TSMC FAB2B	MIHO8
Wafer Fab Process	1833BICOM3ZL_RF	1833BICOM3ZL_RF	1833BICOM3ZL_RF	0.6 DPTM	LBC7

- QBS: Qual by Similarity
- Qual Device HD3SS3412RUA_REV0 is qualified at LEVEL3-260C
- Qual Device HD3SS3412RUA_REV1 is qualified at LEVEL3-260C
- Device HD3SS3412RUA_REV0 contains multiple dies.
- Device HD3SS3412RUA_REV1 contains multiple dies.

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

Type	Test Name / Condition	Duration	Qual Device: HD3SS3412 RUA _REV1	Qual Device: HD3SS3412 RUA _REV0	QBS Process Reference: HD3SS3411TRWA Q1	QBS Package Reference: AMC7823IRTA.	QBS Package Reference: SH6966ACC0RGCR G4 _CU_WIRE
AC	Autoclave 121C	96 Hours	-	-	3/231/0	3/231/0	3/231/0
CDM	ESD - CDM	1500 V	1/3/0	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	-	-	-	-
ELFR	Early Life Failure Rate, 140C	24 Hours	-	-	3/2400/0	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	-	3/231/0
HBM	ESD - HBM	4000 V	1/3/0	-	-	-	-
HTOL	Life Test, 125C	1000 Hours	-	-	-	-	3/231/0
HTOL	Life Test, 140C	480 Hours	-	-	3/231/0	-	-
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	2/90/0	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	3/231/0	3/231/0
LU	Latch-up	(per JESD78)	1/6/0	-	-	-	-
SD	Surface Mount Solderability	Pb Free	-	-	1/15/0	3/66/0	-
SD	Surface Mount Solderability	Pb Solder	-	-	1/15/0	3/66/0	-
TC	Temperature Cycle -65/150C	500 Cycles	-	1/77/0	3/231/0	3/231/0	3/231/0
TS	Thermal Shock - 65/150C	500 Cycles	-	-	-	3/231/0	3/231/0
WBP	Bond Pull	Wires	1/76/0	-	-	3/228/0	3/228/0
WBS	Ball Bond Shear	Wires	1/76/0	-	-	3/228/0	-

- 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/

Green/Pb-free Status:

Qualified Pb-Free (SMT) and Green

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

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