TEXAS INSTRUMENTS **12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

PCN# 20161014000
AMC1305x Die Revision and Datasheet Change
Change Notification / Sample Request

Date: October 17, 2016
To: PREMIER FARNELL PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

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

20161014000
Attachment: 1

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
AMC1305L25DW	null
AMC1305M05DW	null
AMC1305M25DW	null

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

PCN Number:	20161014000	**PCN Date:**	Oct 17, 2016
Title:	AMC1305x Die Revision and Datasheet Change		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Jan 17, 2017	**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:

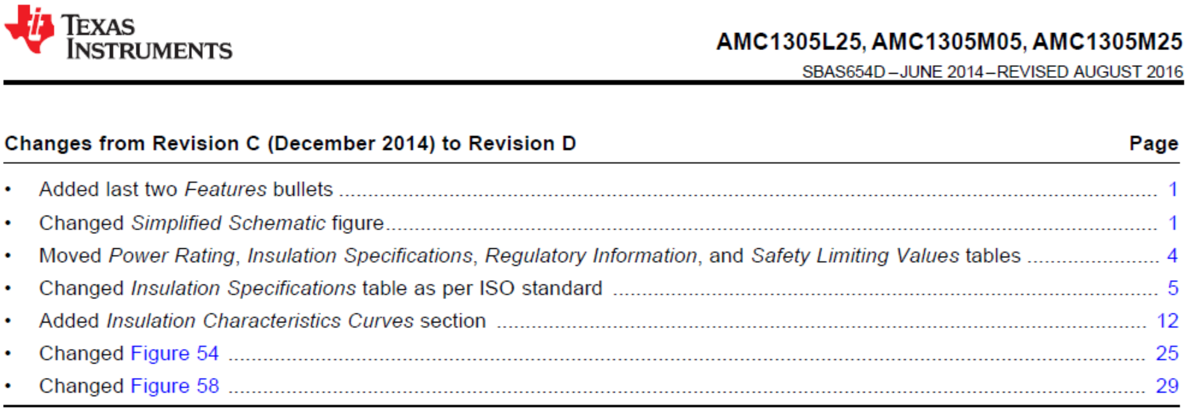
This notification is to inform of a die revision change to the AMC1305x device. The Design changes are summarized below:

1. Isolation data transceiver circuits with improved power supply variation and CMT rejection implemented on the series isolation capacitor die.
2. The ESD protection was replaced with an updated version having a lower clamping voltage. Change verified by qualification, ESD rating improved to 2.5kV HBM.

The Die Revision and the datasheet will be changing:

Current		**New**	
Die Revision	Datasheet Number	**Die Revision**	**Datasheet Number**
E	SBAS654C	**G**	**SBAS654D**

The product datasheet(s) is updated as seen in the change revision history below:



TEXAS INSTRUMENTS

AMC1305L25, AMC1305M05, AMC1305M25

SBAS654D – JUNE 2014 – REVISED AUGUST 2016

Changes from Revision C (December 2014) to Revision D	**Page**
Added last two *Features* bullets	1
Changed *Simplified Schematic* figure	1
Moved *Power Rating*, *Insulation Specifications*, *Regulatory Information*, and *Safety Limiting Values* tables	4
Changed *Insulation Specifications* table as per ISO standard	5
Added *Insulation Characteristics Curves* section	12
Changed Figure 54	25
Changed Figure 58	29

These changes may be reviewed at the datasheet link provided:
http://www.ti.com/lit/gpn/amc1305m25

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]**
E	**G**

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS
MADE IN: Malaysia
2DC: 2Q:

MSL 2 /260C/1 YEAR	SEAL DT
MSL 1 /235C/UNLIM	03/29/04

G4
OPT:
ITEM: 39
LBL: 5A (L)TO:1750

(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T)LOT: 3959047MLA
(4W) TKY(1T) 7523483SI2
(P)
(2P) REV: (V) 0033317
(20L) CSO: SHE (21L) CCO:USA
(22L) ASO: MLA (23L) ACO: MYS

Product Affected:

AMC1305L25DW	AMC1305M05DW	AMC1305M25DW	AMC1305M25DWR
AMC1305L25DWR	AMC1305M05DWR		

Qualification Report

AMC1304 Improved No tail SSB (NTSSB) Bonding qual for Reinforced Isolation devices and rev G modulator die

Approve Date 12-Oct-2016

Product Attributes

Attributes	Qual Device: AMC1304M05DW	QBS Process/Package Reference: AMC1305L25DW
Assembly Site	TAI	TAI
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	DMOS5	DMOS5
Wafer Process	50HPA07, 50HPA07ISOS	50HPA07, 50HPA07ISO-S

- QBS: Qual By Similarity
- Qual Device AMC1304M05DW is qualified at LEVEL3-260C
- Device AMC1304M05DW contains multiple dies.

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: AMC1304M05DW	QBS Process/Package Reference: AMC1305L25DW
ED	Electrical Characterization	Per Datasheet Parameters	-	Pass
ELFR	Early Life Failure Rate, 150C	24 Hours	-	3/2399/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0
HBM	ESD - HBM	2500 V	1/3/0	-
CDM	ESD - CDM	1000 V	1/3/0	1/3/0
HTOL	Life Test, 150C	300 Hours	-	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0	3/231/0
LU	Latch-up	(per JESD78)	1/6/0	2/12/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0

- 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.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com