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

PCN# 20150430001
ULN2003A Die Revision Change
Final Change Notification / Sample Request

Date: 4/30/2015
To: MOUSER 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 changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

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

20150430001
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
ULN2003AD	null
ULN2003ADE4	null
ULN2003ADR	null
ULN2003ADRG3	null
ULN2003AIDE4	null
ULN2003AIDG4	null
ULN2003AIDR	null
ULN2003AIN	null
ULN2003AINE4	null
ULN2003AINSR	null
ULN2003AIPWR	null
ULN2003AIPWRG4	null
ULN2003AN	null
ULN2003ANSR	null
ULN2003ANSRE4	null
ULN2003APWG4	null
ULN2003APWR	null

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

PCN Number:	20150430001	**PCN Date:**	4/30/2015
Title:	Die Revision Change for select ULN2003A devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	7/30/2015	**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. The design change does not affect the device's guaranteed datasheet specifications or electrical performance. Affected devices are listed in "Product Affected" section.

The Die Revision will change as follows:

Current	**New**
Die Revision	**Die Revision**
C/D	**F**

Reason for Change:

Improved delivery and continuity of supply

Anticipated impact on Fit, Form, 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 & sample label below:

Current	**New**
Die Revision [2P]	**Die Revision [2P]**
C/D	**F**

Sample product shipping label to indicate die rev location (**not actual product label**)

TEXAS INSTRUMENTS
G4
MADE IN: Malaysia
2DC: 2Q:

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

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:

ULN2003AD	ULN2003AIDG4	ULN2003AIPWE4	ULN2003ANSR
ULN2003ADE4	ULN2003AIDR	ULN2003AIPWG4	ULN2003ANSRE4
ULN2003ADG4	ULN2003AIDRE4	ULN2003AIPWR	ULN2003ANSRG4
ULN2003ADR	ULN2003AIDRG3	ULN2003AIPWRG4	ULN2003APW
ULN2003ADRE4	ULN2003AIDRG4	ULN2003AN	ULN2003APW-P
ULN2003ADRG3	ULN2003AIN	ULN2003AN-P2	ULN2003APWG3
ULN2003ADRG4	ULN2003AINE4	ULN2003AN-SQ	ULN2003APWG4

ULN2003AID	ULN2003AINSR	ULN2003ANE4	ULN2003APWR
ULN2003AIDE4	ULN2003AIPW	ULN2003ANS	ULN2003APWRG4

Qualification Report

ULN2003A Die Rev 'F' (SC2003FHS) in MLA and ASESH TSSOP (PW)

Approved 11/10/2014

Product Attributes

Attributes	Qual Device: ULN2003AIPW	Qual Device: ULN2003AIPWR	Qual Device: ULN2003APW	Qual Device: ULN2003APWR	QBS Product: ULN2003BD	QBS Package: RC4558PWR	QBS Package: RC4558PWR	QBS Package: GD75232PWR
Assembly Site	MLA	ASESH	MLA	ASESH	ASESH	MLA (TIM)	ASE SHANGHAI	ASE SHANGHAI
Package Family	TSSOP	TSSOP	TSSOP	TSSOP	SOIC	TSSOP	TSSOP	TSSOP
Wafer Fab Site	SFAB	SFAB	SFAB	SFAB	SHE SFAB	SFAB	SFAB	SHE
Wafer Fab Process	JI1	JI1	JI1	JI1	JI-1	JI-SLM	JI-SLM	-

- QBS: Qual By Similarity
- Qual Devices qualified at LEVEL1-260CG: ULN2003AIPW, ULN2003AIPWR, ULN2003AIPWR, ULN2003APW, ULN2003APWR

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: ULN2003AIPW	Qual Device: ULN2003AIPWR	Qual Device: ULN2003APW	Qual Device: ULN2003APWR	QBS Product: ULN2003BD	QBS Package: RC4558PWR	QBS Package: RC4558PWR	QBS Package: GD75232PWR
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	1/77/0	1/77/0	3/231/0
AC	Autoclave 121C	96 Hours	-	-	-	-	-	1/77/0	-	-
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	-	-	-	1/77/0	3/231/0
TC	Temperature Cycle -55/125C	700 Cycles	-	-	-	-	-	1/77/0	-	-
TC	Temperature Cycle -65/150C	500 Cycles	-	-	-	-	1/77/0	1/77/0	1/77/0	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-	-	-	1/77/0	1/77/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-	-	-	-	3/231/0
TS	Thermal Shock -65/150C	500 Cycles	-	-	-	-	-	1/77/0	-	3/231/0
HTOL	Life Test, 150C	300 Hours	-	-	-	-	1/77/0	1/77/0	1/77/0	3/231/0
WBP	Bond Pull	Wires	-	-	-	-	1/76/0	-	-	-
SD	Solderability	Post 8 Hours Steam Age	-	-	-	-	-	-	-	3/66/0
PD	Physical Dimensions	--	-	-	-	-	-	-	-	3/15/0
LI	Lead Fatigue	Leads	-	-	-	-	-	-	-	3/66/0
LI	Lead Pull	Leads	-	-	-	-	-	-	-	3/66/0
HBM	ESD - HBM	4000 V	-	-	-	-	1/3/0	-	-	-
CDM	ESD - CDM	1500 V	-	-	-	-	-	-	-	-
LU	Latch-up	(per JESD78)	-	-	-	-	1/6/0	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	-	Pass	Pass	Pass	-
WBS	Bond Strength	Wires	-	-	-	-	1/76/0	1/76/0	1/76/0	3/231/0
FLAM	Flammability (IEC 695-2-2)	--	-	-	-	-	-	-	-	3/15/0
FLAM	Flammability (UL 94V-0)	--	-	-	-	-	-	-	-	3/15/0
FLAM	Flammability (UL-1694)	--	-	-	-	-	-	-	-	3/15/0

- 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

Qualification Report

ULN2003A Die Rev 'F' (SC2003FHS) in MLA SOP (NS) ULN2003AINSR / ULN2003ANS

Approved 02/11/2015

Product Attributes

Attributes	Qual Device: ULN2003AINSR	Qual Device: ULN2003ANS	QBS Product: ULN2003BD	QBS Product: ULN2003BD.	QBS Product: ULN2003BD..	QBS Product: ULN2003BN	QBS Product: ULN2003BPW	QBS Product: ULN2003BPW.	QBS Package: CABT646ANSR	QBS Package: 2F1177NS	QBS Package: TL092CPS
Assembly Site	MLA	MLA	ASESH	MLA	ASESH	JCET CHUZHOU	ASESH	MLA	MLA	MLA	MLA
Package Family	SOP	SOP	SOIC	SOIC	SOIC	PDIP	TSSOP	TSSOP	SOP	-	-
Wafer Fab Site	SFAB	SFAB	SHE SFAB	SHE SFAB	SHE SFAB	SHE SFAB	SHE SFAB	SHE SFAB	FFAB	SFAB	SFAB
Wafer Fab Process	JI1	JI1	JI-1	JI-1	JI-1	JI-1	JI-1	JI-1	ASL2B	OI2	JI1

- QBS: Qual By Similarity
- Qual Devices qualified at LEVEL1-260CG: ULN2003AINSR, ULN2003ANS

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: ULN2003AINSR	Qual Device: ULN2003ANS	QBS Product: ULN2003BD	QBS Product: ULN2003BD.	QBS Product: ULN2003BD..	QBS Product: ULN2003BN	QBS Product: ULN2003BPW	QBS Product: ULN2003BPW.	QBS Package: CABT646ANSR	QBS Package: 2F1177NS	QBS Package: TL092CPS
AC	Autoclave 121C	96 Hours	-	-	-	-	-	-	-	-	3/231/0	3/231/0	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	1/77/0	-	1/77/0	-	-	-	3/231/0	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-	-	-	-	-	3/231/0	-	3/231/0
HTOL	Life Test, 150C	300 Hours	-	-	1/77/0	-	-	-	-	-	-	-	-
WBP	Bond Pull	Wires	-	-	1/76/0	1/76/0	-	1/76/0	1/76/0	1/76/0	-	-	-
HBM	ESD - HBM	4000 V	-	-	1/3/0	-	-	-	-	-	-	-	-
CDM	ESD - CDM	1000 V	-	-	1/3/0	-	-	1/3/0	-	-	-	-	-
LU	Latch-up	(per JESD78)	-	-	1/6/0	-	-	-	-	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	-	Pass	Pass	-	Pass	-	-	-	-	-	-
WBS	Bond Strength	Wires	-	-	1/76/0	1/76/0	-	1/76/0	1/76/0	1/76/0	-	-	-

- 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

Qualification Report

ULN2003A Die Rev 'F' (SC2003FHS) in PDIP (N), ULN2003AIN / ULN2003AN

Approved 01/30/2015

Product Attributes

Attributes	Qual Device: ULN2003AIN	Qual Device: ULN2003AIN.	Qual Device: ULN2003AN	Qual Device: ULN2003AN.	QBS Product: ULN2003BD	QBS Product: ULN2003BD.	QBS Product: ULN2003BD..	QBS Product: ULN2003BN	QBS Product: ULN2003BPW	QBS Product: ULN2003BPW.	QBS Package: SN74HC273N-P2	QBS Package: ULN2003AN	QBS Package: NE5532P	QBS Package: ULN2003AN	QBS Package: SN74HC594N	QBS Package: CD4051BE	QBS Package: ULN2003AN
Assembly Site	MLA	FMX	JCET CHUZHOU	NFME	ASESH	MLA	ASESH	JCET CHUZHOU	ASESH	MLA	MLA	MLA	FMX	FMX	NFME	JCET CHUZHOU	JCET CHUZHOU
Package Family	PDIP	PDIP	PDIP	N	SOIC	SOIC	SOIC	PDIP	TSSOP	TSSOP	PDIP	PDIP	PDIP	PDIP	PDIP	PDIP	PDIP
Wafer Fab Site	SFAB	SFAB	SFAB	SFAB	SHE SFAB	SHE SFAB	SHE SFAB	SHE SFAB	SHE SFAB	SHE SFAB	SFAB	SFAB	SFAB	SFAB	SHE SFAB	SFAB	SFAB
Wafer Fab Process	JI1	JI1	JI1	JI1	JI-1	JI-1	JI-1	JI-1	JI-1	JI-1	74HC-NONEPI	JI1	JI SLM	JI-SLM	HCMOS	HC-C	JI1

- QBS: Qual by Similarity
- Qual Devices qualified at LEVEL1-260CG: ULN2003AIN, ULN2003AIN

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: ULN2003AIN	Qual Device: ULN2003AIN.	Qual Device: ULN2003AN	Qual Device: ULN2003AN.	QBS Product: ULN2003BD	QBS Product: ULN2003BD.	QBS Product: ULN2003BD..	QBS Product: ULN2003BN	QBS Product: ULN2003BPW	QBS Product: ULN2003BPW.	QBS Package: SN74HC273N-P2	QBS Package: ULN2003AN	QBS Package: NE5532P	QBS Package: ULN2003AN	QBS Package: SN74HC594N	QBS Package: CD4051BE	QBS Package: ULN2003AN
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	-	-	-	-	-	-	3/231/0	1/77/0	1/77/0	3/231/0	3/231/0	3/231/0
AC	Autoclave 121C	96 Hours	-	-	-	-	-	-	-	-	-	-	1/77/0	-	1/77/0	1/77/0	-	3/231/0	-
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/231/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	-	1/77/0	-	1/77/0	-	-	-	1/77/0	-	1/77/0	1/77/0	3/231/0	3/231/0	-
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/231/0	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-	-	-	-	-	-	-	1/77/0	-	1/77/0	1/77/0	-	3/231/0	-
TS	Thermal Shock - 65/150C	500 cycles	-	-	-	-	-	-	-	-	-	-	-	-	1/77/0	1/77/0	3/231/0	-	-
HTOL	Life Test, 150C	300 Hours	-	-	-	-	1/77/0	-	-	-	-	-	-	-	1/77/0	1/77/0	3/231/0	3/231/0	-
WBS	Ball Bond Shear	Wires	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/231/0	3/228/0	3/228/0
WBP	Bond Pull	Wires	-	-	-	-	1/76/0	1/76/0	-	1/76/0	1/76/0	1/76/0	-	-	-	-	-	3/228/0	3/228/0
SD	Solderability	8 Hours Steam Age	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/66/0	-
PD	Physical Dimensions	--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/15/0	3/15/0	-
LI	Lead Fatigue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/66/0	-	-
LI	Lead Fatigue	Leads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/66/0	-
HBM	ESD - HBM	4000 V	-	-	-	-	1/3/0	-	-	-	-	-	-	-	-	-	-	-	-
CDM	ESD - CDM	1000 V	-	-	-	-	1/3/0	-	-	1/3/0	-	-	-	-	-	-	-	-	-
LU	Latch-up	(per JESD78)	-	-	-	-	1/6/0	-	-	-	-	-	-	-	-	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	-	Pass	Pass	-	Pass	-	-	-	Pass	-	Pass	Pass	Pass	Pass	-
	Bond Strength	Wires	-	-	-	-	1/76/0	1/76/0	-	1/76/0	1/76/0	1/76/0	-	-	1/76/0	1/76/0	3/234/0	-	-
LI	Lead Pull to Destruction	Leads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/66/0	-
LI	Lead Pull	Leads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/66/0	-	-
FLAM	Flammability (IEC 695-2-2)	--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/15/0	3/15/0	-
FLAM	Flammability (UL 94V-0)	--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/15/0	3/15/0	-
FLAM	Flammability (UL-1694)	--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3/15/0	3/15/0	-

- 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

Qualification Report

ULN2003A Die Rev 'F' (SC2003FHS) in SOIC(D)

Approved 01/21/2015

□

Product Attributes

Die Attributes	Qual Device: ULN2003AD	Qual Device: ULN2003AID	Qual Device: ULN2003AIDR	QBS Product: ULN2003BD	QBS Product: ULN2003BD.	QBS Product: ULN2003BD..	QBS Product: ULN2003BN	QBS Product: ULN2003BPW	QBS Product: ULN2003BPW.	QBS Package: CD4053BM96	QBS Package: LM358DR	QBS Package: RC4558DR	QBS Package: SN74LV14ADR	QBS Package: MAX232DR	QBS Package: RC4558DR	QBS Package: SN74LV14ADR	QBS Package: ULN2003ADR	QBS Package: CD4053BM96	QBS Package: LM358DR	QBS Package: TL494IDR	QBS Package: ULN2003ADR
Die Revision	F	F	F	F	F	E	F	F	F	A	E	B	H	B	B	H	C	A	E	H	C
Wafer Fab Site	SFAB	SFAB	SFAB	SHE SFAB	SHE SFAB	SHE SFAB	SHE SFAB	SHE SFAB	SHE SFAB	SFAB	SFAB	SFAB	SFAB	SFAB	SFAB	SFAB	SFAB	SFAB	SFAB	SFAB	SFAB
Wafer Fab Process	JI1	JI1	JI1	JI-1	JI-1	JI-1	JI-1	JI-1	JI-1	CD4K	JI-SLM	JI-SLM	EPIC1-S_SLM	LBC3S	JI1-Lin	EPIC1-S_SLM	JI-SLM	CD4K	JI-SLM 20K	JI-LIN 55K	JI-SLM 20K

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: ULN2003AD	Qual Device: ULN2003AID	Qual Device: ULN2003AIDR	QBS Product: ULN2003BD	QBS Product: ULN2003BD.	QBS Product: ULN2003BD..	QBS Product: ULN2003BN	QBS Product: ULN2003BPW	QBS Product: ULN2003BPW.	QBS Package: CD4053BM96	QBS Package: LM358DR	QBS Package: RC4558DR	QBS Package: SN74LV14ADR	QBS Package: MAX232DR	QBS Package: RC4558DR	QBS Package: SN74LV14ADR	QBS Package: ULN2003ADR	QBS Package: CD4053BM96	QBS Package: LM358DR	QBS Package: TL494IDR	QBS Package: ULN2003ADR
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	-	-	-	-	1/77/0	1/77/0	1/77/0	1/77/0	3/231/0	1/77/0	1/77/0	1/77/0	1/77/0	1/77/0	3/229/0	1/77/0
AC	Autoclave 121C	96 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	3/231/0	1/77/0	1/77/0	1/77/0	1/77/0	1/77/0	3/231/0	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	-	-	-	-	1/77/0	1/77/0	1/77/0	1/77/0	-	-	-	-	-	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	1/77/0	-	1/77/0	-	-	-	1/77/0	1/77/0	1/77/0	1/77/0	3/231/0	3/231/0	3/231/0	3/231/0	1/77/0	3/231/0	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	-	-	-	-	-	-	-	-	-	1/77/0	1/77/0	1/77/0	1/77/0	-	3/231/0	3/231/0	-	-	-	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	3/231/0	-	-	3/231/0	1/77/0	1/77/0	-	-
TS	Thermal Shock - 65/150C	500 Cycles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/77/0	3/231/0	3/231/0	3/231/0
HTOL	Life Test, 150C	300 Hours	-	-	-	1/77/0	-	-	-	-	-	1/77/0	1/77/0	1/77/0	1/77/0	3/231/0	1/77/0	1/77/0	1/77/0	1/77/0	1/77/0	3/231/0	1/77/0
WBP	Bond Pull	Wires	-	-	-	1/76/0	1/76/0	-	1/76/0	1/76/0	1/76/0	-	-	-	-	-	-	-	-	-	-	-	-
HBM	ESD - HBM	4000 V	-	-	-	1/3/0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CDM	ESD - CDM	1000 V	-	-	-	1/3/0	-	-	1/3/0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LU	Latch-up	(per JESD78)	-	-	-	1/6/0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	Pass	-	Pass	-	-	-	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
WBS	Bond Strength	Wires	-	-	-	1/76/0	1/76/0	-	1/76/0	1/76/0	1/76/0	1/76/0	1/76/0	1/76/0	1/76/0	3/228/0	1/76/0	1/76/0	1/76/0	1/76/0	1/76/0	3/228/0	1/76/0
LI	Lead Pull to Destruction	Leads	-	-	-	-	-	-	-	-	-	-	-	-	-	3/66/0	1/22/0	1/22/0	1/22/0	-	-	-	-
LI	Lead Pull	Leads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/22/0	1/22/0	3/66/0	3/66/0
FLAM	Flammability (IEC 695-2-2)	--	-	-	-	-	-	-	-	-	-	-	-	-	-	3/15/0	1/5/0	1/5/0	-	-	-	3/15/0	-
FLAM	Flammability (UL 94V-0)	--	-	-	-	-	-	-	-	-	-	-	-	-	-	3/15/0	1/5/0	1/5/0	-	-	-	3/15/0	-
FLAM	Flammability (UL-1694)	--	-	-	-	-	-	-	-	-	-	-	-	-	-	3/15/0	1/5/0	1/5/0	-	-	-	3/15/0	-

- 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 your local Field Sales Representative.

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