


PCN Number:	20230906003.1		PCN Date:	September 06, 2023	
Title:	Qualification of RFAB using qualified Process Technology, Die Revision, Datasheet and additional Assembly site/BOM options for select devices				
Customer Contact:	Change Management team		Dept:	Quality Services	
Proposed 1st Ship Date:	Dec 6, 2023		Sample requests accepted until:	October 6, 2023*	
*Sample requests received after October 6, 2023 will not be supported.					
Change Type:					
<input checked="" type="checkbox"/> Assembly Site	<input checked="" type="checkbox"/> Design	<input type="checkbox"/> Wafer Bump Material			
<input checked="" type="checkbox"/> Assembly Process	<input checked="" type="checkbox"/> Data Sheet	<input type="checkbox"/> Wafer Bump Process			
<input checked="" type="checkbox"/> Assembly Materials	<input type="checkbox"/> Part number change	<input checked="" type="checkbox"/> Wafer Fab Site			
<input type="checkbox"/> Mechanical Specification	<input type="checkbox"/> Test Site	<input checked="" type="checkbox"/> Wafer Fab Materials			
<input checked="" type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/> Test Process	<input checked="" type="checkbox"/> Wafer Fab Process			
PCN Details					
Description of Change:					
Texas Instruments is pleased to announce the addition of RFAB using the LBC7 qualified process technology and additional Assembly site (HFTF) for the devices listed below in the product affected section.					
Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
SFAB	EPIC1ZS	150 mm	RFAB	LBC7	300 mm
The die was also changed as a result of the process change.					
Construction differences are as follows:					
DCT Package					
	HNA	HIT	HFTF		
Wire type	1.0 mil Au	0.8mil Au	0.8mil Cu		
Mount compound	400728	RZ241C	A-18		
Mold compound	450420	G600K	R-30		
Lead finish	NiPdAu	NiPdAu	Matte Sn		
DCU Package					
	HNA	ASESH	HFTF		
Wire type	0.8 mil Au	0.8mil Au	0.8mil Cu		
Mount compound	400180	EY1000063	A-18		
Mold compound	450207	EN2000507	R-31		
Lead finish	NiPdAu	Matte Sn	Matte Sn		
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.					
			SN74TVC3306 <small>SCDS112E – MARCH 2001 – REVISED SEPTEMBER 2023</small>		
Changes from Revision D (December 2014) to Revision E (September 2023)					Page
• Changed the numbering format for tables, figures, and cross-references throughout the document.....					1
• Changed the thermal values to reflect device performance.....					4
• Changed the switching characteristics to reflect device performance.....					5

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
CD4051B, CD4052B, CD4053B	SCDS112D	SCDS112E	http://www.ti.com/product/SN74TVC3306

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 and 200-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
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> 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
SH-BIP-1	SHE	USA	Sherman
RFAB	RFB	USA	Richardson

Die Rev:

Current

New

Die Rev [2P]	Die Rev [2P]
-	A

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
HIT	HTC	JPN	Kitatsugaru, Aomori
HNA	HNT	THA	Ayutthaya
ASESH	ASH	CHN	Shanghai
HFTF	HFT	CHN	Hefei

Sample product shipping label (not actual product label)



(1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY (1T) 7523483SI2
 (P)
 (2P) REV: (V) 0000017
 (20L) CSO: SHE (21L) CCO: USA
 (22L) ASO: MLA (23L) ACO: MYS

Product Affected:

SN74TVC3306DCTR	SN74TVC3306DCUR
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For alternate parts with similar or improved performance, please visit the product page on [TI.com](http://ti.com)

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN74TVC3306DCTR	Qual Device: SN74TVC3306DCUR	QBS Reference: PCA9306DCTR	QBS Reference: TCA39306DCUR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	-	1/77/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	3/231/0	1/77/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	3/231/0	1/77/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	3/231/0	1/77/0
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	-	-	3/228/0	-
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	-	-	3/228/0	-
ESD	E2	ESD CDM	-	2000 Volts	-	1/3/0	-	-
ESD	E2	ESD CDM	-	250 Volts	-	-	1/3/0	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	-	-	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	-	1/3/0	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	-	-	1/30/0	1/30/0

- QBS: Qual By Similarity
- Qual Device SN74TVC3306DCTR is qualified at MSL1 260C
- Qual Device SN74TVC3306DCUR is qualified at MSL1 260C
- 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-CHG-2308-067

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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