

PCN Number:	20230112000.1	PCN Date:	January 12, 2023
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Title: Qualification of new Fab site (RFAB) using qualified Process Technology, Die Revision and Datasheet update for select devices

Customer Contact: [PCN Manager](#) **Dept:** Quality Services

Proposed 1st Ship Date: Apr 12, 2023 **Sample requests accepted until:** Feb 12, 2023*

***Sample requests received after February 12, 2023 will not be supported.**

Change Type:					
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials
<input checked="" type="checkbox"/>	Design	<input checked="" type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/>	Wafer Fab Site	<input checked="" type="checkbox"/>	Wafer Fab Materials	<input checked="" type="checkbox"/>	Wafer Fab Process
		<input type="checkbox"/>	Part number change		

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of a new fab & process technology (RFAB, LBC7) for the device 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
DL-LIN	LBC3S	150 mm	RFAB	LBC7	300 mm
DL-LIN	LBC3S	200 mm			

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

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



MAX3222E
SLLS708C – JANUARY 2006 – REVISED JANUARY 2023

Changes from Revision B (August 2021) to Revision C (January 2023) **Page**

- Changed the *ESD Ratings - IEC Specifications* table note to include the DB package..... 4
- Changed the values of R_{θJA} in the *Thermal Information* table for the DB package..... 5

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
MAX3222E	SLLS708B	SLLS708C	http://www.ti.com/product/MAX3222E

Tube, temperature, and ESD protection variants of the devices are included in EOL notice PDN# 20230112003.3.

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

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
RFAB	RFB	USA	Richardson

Die Rev:

Current	New
Die Rev [2P]	Die Rev [2P]
G	B

Sample product shipping label (not actual product label)

Product Affected:

MAX3222EIDBR

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

Qualification Report
Approve Date 21-DECEMBER -2022

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: PTRS3222EIDBR	QBS Reference: TPS51217DSCR	QBS Reference: SRC4190IDB	QBS Reference: TRSF3222EIPWR	QBS Reference: TPD3S714QDBQRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	-	-	
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	3/231/0	3/231/0	3/231/0	
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	3/231/0	3/231/0	-	
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	3/231/0	3/231/0	-	
HTOL	B1	Life Test	135C	635 Hours	-	3/231/0	-	-	
HTOL	B1	Life Test	150C	408 Hours	-	-	-	3/231/0	
ELFR	B2	Early Life Failure Rate	150C	24 Hours	-	-	-	3/2400/0	
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	1/76/0	-	1/76/0	-	
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	1/76/0	-	1/76/0	3/228/0	
SD	C3	PB Solderability	Post 8hr steam	-	-	-	-	3/45/0	
SD	C3	PB-Free Solderability	Post 8hr steam	-	-	-	-	3/45/0	
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	-	3/30/0	
ESD	E2	ESD CDM	-	1500 Volts	-	3/9/0	-	3/9/0	

ESD	E2	ESD CDM	-	2000 Volts	-	-	-	1/3/0	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	-	-
ESD	E2	ESD HBM	-	16000 Volts	-	-	-	1/3/0	-
ESD	E2	ESD HBM	-	2000 Volts	-	3/9/0	-	-	-
ESD	E2	ESD HBM	-	4000 Volts	-	-	-	1/3/0	3/9/0
LU	E4	Latch-Up	Per JESD78	-	-	3/18/0	-	1/3/0	3/18/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/5/0	3/60/0	-	1/5/0	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	-	-	3/90/0

- QBS: Qual By Similarity
- Qual Device PTRS3222EIDBR 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/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

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

Location	E-Mail
WW Change Management Team	PCN_ww_admin_team@list.ti.com

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