

<b>PCN Number:</b>	20230522001.1		<b>PCN Date:</b>	May 24, 2023	
<b>Title:</b>	Qualification of RFAB as an additional Fab site option and Assembly site Option for select BCB8 devices				
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>		<b>Dept:</b>	Quality Services	
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Aug 24, 2023		<b>Sample requests accepted until:</b>	June 24, 2023*	
<b>*Sample requests received after June 24, 2023 will not be supported.</b>					
<b>Change Type:</b>					
<input checked="" type="checkbox"/>	Assembly Site	<input checked="" type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Assembly Materials
<input checked="" type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input 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		
<b>PCN Details</b>					
<b>Description of Change:</b>					
Texas Instruments is pleased to announce the qualification of its RFAB fabrication facility as an additional Wafer Fab option in addition to new Assembly site (MLA) for the devices listed in the "Product Affected" section.					
<b>Current Fab Site</b>			<b>New Fab Site</b>		
<b>Fab Site</b>	<b>Process</b>	<b>Wafer Diameter</b>	<b>Fab Site</b>	<b>Process</b>	<b>Wafer Diameter</b>
DL-LIN	LINCMOS	150 mm	RFAB	LBC9	300 mm
Construction differences and AT site options are as follows:					
	<b>FMX</b>	<b>TAI</b>	<b>MLA</b>		
Bond wire composition, diameter	Cu, 0.96 mil	Au, 0.96 mil	Cu, 0.8 mil		
Note: Devices in the device list below are in either FMX or TAI					
<b>Reason for Change:</b>					
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.					
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>					
None					
<b>Impact on Environmental Ratings</b>					
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.					
<b>RoHS</b>	<b>REACH</b>	<b>Green Status</b>	<b>IEC 62474</b>		
<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
DL-LiN	DLN	USA	Dallas
<b>RFAB</b>	<b>RFB</b>	<b>USA</b>	<b>Richardson</b>

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
FMX	MEX	MEX	Aguascalientes
TI Taiwan	TAI	TWN	Chung Ho, New Taipei City
<b>MLA</b>	<b>MLA</b>	<b>MYS</b>	<b>Kuala Lumpur</b>

### Die Rev:

#### Current

#### New

Die Rev [2P]	Die Rev [2P]
B	<b>C</b>

Sample product shipping label (not actual product label):


**TEXAS INSTRUMENTS**  
 MADE IN: Malaysia  
 2DC: 20:


**G4**



(1P) **SN74LS07NSR**  
 (Q) **2000** (D) **0336**  
 (31T) LOT: 3959047MLA  
 (4W) TKY (1T) 7523483SI2  
 (P)  
 (2P) REV: (V) **0033317**  
 (20L) CS0: SHE (21L) CC0:USA  
 (22L) AS0: MLA (23L) AC0: MYS

OPT: 39  
 ITEM:  
**LBL: 5A (L)T0:1750**

### Product Affected:

TLC3702CDR	TLC3702MDR	TLC393CDR	TLC393QDRG4
TLC3702CDRG4	TLC3702MDRG4	TLC393QDR	

## Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: TLC3702IDR	Qual Device: TLC393QDR	QBS Reference: SN74HCS74QPWRQ1	QBS Reference: OPA2991QDRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	1/77/0	-	-	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	1/77/0	-	-	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	3/135/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	1/77/0	-	-	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	3/231/0	-
HTOL	B1	Life Test	150C	300 Hours	1/77/0	-	-	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	3/2400/0	-
ESD	E2	ESD CDM	-	500 Volts	1/3/0	1/3/0	-	-
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	1/3/0	-	-
LU	E4	Latch-Up	Per JESD78	-	1/6/0	1/6/0	-	-
LU	E4	Latch-Up	Per JESD78	-	1/6/0	1/6/0	-	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	3/90/0	-	-	-

- QBS: Qual By Similarity
- Qual Device TLC393QDR is qualified at MSL1 260C
- Qual Device TLC3702IDR 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

TI Qualification ID: R-CHG-2302-027

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

Location	E-Mail
WW Change Management Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>

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