

<b>PCN Number:</b>	20210419000.1		<b>PCN Date:</b>	Apr 20, 2021	
<b>Title:</b>	Qualification of additional Fab site (RFAB) using qualified Process Technology, Die Revision, and additional Assembly site (MLA) options for select devices				
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>		<b>Dept:</b>	Quality Services	
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Jul 20, 2021		<b>Estimated Sample Availability:</b>	Date provided at sample request.	
<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>Notification Details</b>					
<b>Description of Change:</b>					
Texas Instruments is pleased to announce the qualification of an additional fab (RFAB) using qualified Process Technology, Die Revision and assembly site (MLA) for the selected devices listed in the "Product Affected" section.					
<b>Current Fab Site</b>			<b>Additional Fab Site</b>		
<b>Current Fab Site</b>	<b>Process</b>	<b>Wafer Diameter</b>	<b>Additional Fab Site</b>	<b>Process</b>	<b>Wafer Diameter</b>
FFAB	BCB	200 mm	RFAB	LBC9	300 mm
Construction differences are noted below:					
	<b>Current (FMX, ASESH)</b>		<b>New (MLA)</b>		
Lead finish	NiPdAu, Matte Sn		NiPdAu		
Wire type	0.8mil Au		0.8mil Cu		
Mount Compound	4147858, EY1000063		4147858		
Mold Compound	4211880, EN2000509		4211880		
Qual details are provided in the Qual Data Section.					
<b>Reason for Change:</b>					
Continuity of supply.					
1) To align with world technology trends and use wiring with enhanced mechanical and electrical properties					
2) Maximize flexibility within our Assembly/Test production sites.					
3) Cu is easier to obtain and stock					
<b>Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):</b>					
None.					
<b>Anticipated impact on Material Declaration</b>					
<input type="checkbox"/>	No Impact to the Material Declaration		<input checked="" type="checkbox"/>	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the <a href="#">II Eco-Info website</a> . There is no impact to the material meeting current regulatory compliance requirements with this PCN 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
FR-BIP-1	TID	DEU	Freising
<b>RFAB</b>	<b>RFB</b>	<b>USA</b>	<b>Richardson</b>

**Die Rev:**


**Current                      New**

Die Rev [2P]	Die Rev [2P]
-	<b>A</b>

**Assembly Site Information:**

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
ASESH	ASH	CHN	Shanghai
FMX	MEX	MEX	Aguascalientes
<b>MLA</b>	<b>MLA</b>	<b>MYS</b>	<b>Kuala Lumpur</b>

Sample product shipping label (not actual product label)


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

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

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

 G4



G3 = Matte Sn  
G4 = NiPdAu

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

**Product Affected:**

LMV393ID	LMV393IDR	LMV393IDRG4
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## Qualification Report

Approve Date 28-Jan-2021

### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: LMV393IDRR	QBS Product Reference: TLV9022DR	QBS Process Reference: SN74HC574QPWRQ1	QBS Package Reference: LM393DR ROUGH LDF	QBS Package Reference: LM393DR STD LDF
HTOL	Life Test, 150C	300 Hours	-	1/77/0	3/231/0	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	1/77/0	-	-	3/231/0
AC	Autoclave 121C	96 Hours	-	-	-	3/231/0	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	1/77/0	-	-	-
TC	Temperature Cycle, - 65/150C	500 Cycles	-	1/77/0	-	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	-	1/77/0	-	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	3/231/0	3/231/0
HBM	ESD - HBM - Q100	2000 V	-	1/3/0	-	-	-
CDM	ESD - CDM	1000 V	-	1/3/0	-	-	-
LU	Latch-up	(per JESD78)	-	1/6/0	-	-	-
WBP	Bond Pull	Wires	-	1/80/0	-	-	-
WBS	Ball Bond Shear	Wires	-	1/80/0	-	-	-

- QBS: Qual By Similarity

- Qual Device LMV393IDR is qualified at LEVEL1-260C

- 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 contacts shown below or your local Field Sales Representative.

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