

<b>PCN Number:</b>	20220930000.1	<b>PCN Date:</b>	October 03, 2022
<b>Title:</b>	Qualification of new Fab site (RFAB) using qualified Process Technology, Die Revision, and BOM option for the LMV393IPWR/G4		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Jan. 3, 2023	<b>Sample Requests accepted until:</b>	Nov. 3, 2022*

**\*Sample requests received after Nov. 3, 2022 will not be supported.**

**Change Type:**

<input 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		

**PCN Details**

**Description of Change:**

Texas Instruments is pleased to announce the qualification of a new fab & process technology (RFAB, LBC9) die revision, and BOM option for selected devices as listed below for the LMV393IPWR/G4. Construction differences are noted below:

Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
FR-BIP-1	BCB	200 mm	RFAB	LBC9	300 mm

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

Additionally, there will be a BOM options as follows:

	Current	Alternate
Bond wire composition, diameter	Au, 0.8 mil	Cu, 0.8 mil

The datasheets will be changing as a result of the above mentioned changes. There will be no relaxation of any datasheet limits for electrical parameters. The thermal resistance has increased from 149 °C/W to 221.7° C/W. This change is not expected to affect any typical application because the LMV393 is a low power device. The PCN for these datasheet changes will be issued early to mid-next year.

**Reason for Change:**

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
FR-BIP-1	TID	DEU	Freising
<b>RFAB</b>	<b>RFB</b>	<b>USA</b>	<b>Richardson</b>

**Die Rev:**

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

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS  
 MADE IN: Malaysia  
 2DC: 2Q:  
 MSL 2 /260C/1 YEAR SEAL DT  
 MSL 1 /235C/UNLIM 03/29/04  
 OPT: 39  
 ITEM:  
**LBL: 5A (L)T0:1750**

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

**Product Affected:**

LMV393IPWR	LMV393IPWRG4
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TI Information  
Selective Disclosure

**Qualification Report**  
Approve Date 29-JUNE -2022

**Qualification Results**

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

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Type	#	Test Name	Condition	Duration	Qual Device: <u>LMV393IPWR</u>	QBS Product Reference: <u>TLV9032QPWRQ1</u>	QBS Process/Package Reference: <u>SN74HCS74QPWRQ1</u>
HAST	A2	Biased HAST	130C/85%RH	96 Hours	1/77/0	1/77/0	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	1/77/0	1/77/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	1000 Cycles	1/77/0	1/77/0	3/231/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	1/77/0	1/77/0	3/135/0
HTOL	B1	Life Test	150C	300 Hours	1/77/0	1/77/0	3/231/0
ESD	E2	ESD CDM	-	1500 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	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	-

- QBS: Qual By Similarity
- Qual Device LMV393IPWR 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-2203-044

For questions regarding this notice, e-mails can be sent to the contacts 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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