


<b>PCN Number:</b>	20210611000.1		<b>PCN Date:</b>	June 14, 2021	
<b>Title:</b>	Qualification of new Fab site (CFAB) using qualified Process Technology, Die Revision and updated BOM 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>	Sep 14, 2021		<b>Estimated Sample Availability:</b>	Date provided at sample request.	
<b>Change Type:</b>					
<input type="checkbox"/>	Assembly Site	<input 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 a new fab using a qualified process technology (CFAB, JI3) and updated BOM options for select devices as listed below in the product affected section.					
<b>Current Fab Site</b>			<b>New Fab Site</b>		
<b>Current Fab Site</b>	<b>Process</b>	<b>Wafer Diameter</b>	<b>New Fab Site</b>	<b>Process</b>	<b>Wafer Diameter</b>
SFAB	JI1	150 mm	CFAB	JI3	200 mm
The die was also changed as a result of the process change.					
<b>Construction differences are noted below:</b>					
<b>Current Bond wire, Diameter</b>			<b>Additional Bond wire, diameter</b>		
Cu, 0.96 mil			Cu, 0.8 mil		
<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>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="#">TI ECO website</a> .		
<b>Changes to product identification resulting from this PCN:</b>					
<b>Fab Site Information:</b>					
Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City		
SH-BIP-1	SHE	USA	Sherman		
<b>CFAB</b>	<b>CU3</b>	<b>CHN</b>	<b>Chengdu</b>		
<b>Die Rev:</b>	<b>Current</b>	<b>New</b>			
Product Family	Die Rev [2P]	<b>Die Rev [2P]</b>			
LM2903, LM293, LM393P	B	<b>A</b>			
LM393AP	A	<b>A</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**

**Pb**  
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:**

LM2903P	LM293PE4	LM393APE4	LM393PE4
LM293P	LM393AP	LM393P	

**Qualification Report**

**Approve Date 29-Apr-2021**

**Qualification Results**

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

Type	Test Name / Condition	Duration	Qual Device: LM393AP	QBS Product Reference: LM2903AVQDRQ1	QBS Package Reference: NE5532P	QBS Package Reference: UCC37322P
AC	Autoclave 121C	96 Hours	1/77/0	-	-	3/231/0
HTOL	Life Test, 150C	300 Hours	-	3/231/0	3/231/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	1/77/0	-	-	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	-	3/90/0	-	-
FLAM	Flammability (UL 94V-0)	-	-	-	-	3/15/0
LI	Lead Fatigue	Leads	-	-	3/66/0	3/45/0
LI	Lead Pull to Destruction	Leads	-	-	3/72/0	3/70/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	-	Pass	Pass
PKG	Lead Finish Adhesion	Leads	-	-	3/45/0	3/45/0
SD	Solderability	8 Hours Steam Age	-	-	3/66/0	3/66/0

- QBS: Qual By Similarity
- Qual Device LM393AP is qualified at Not Classified Moisture Sensitivity Level
- 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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