

PCN Number:	20230606000.1A		PCN Date:	December 18, 2023	
Title:	Qualification of TI Chengdu as an alternate Assembly site for select devices				
Customer Contact:	Change Management team		Dept:	Quality Services	
Proposed 1st Ship Date:	Sept 07, 2023	Sample Requests accepted until:	July 07, 2023		
*Sample requests received after July 07, 2023 will not be supported.					
Change Type:					
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Fab Site
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Materials
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Process
PCN Details					
Description of Change:					
Revision A is to remove devices in the Product Affected Section (in bold character with strike through). This device will continue to be manufactured as prior and will not be subjected to the change described in this notification.					
Texas Instruments Incorporated is announcing the qualification of TI Chengdu as an additional Assembly site for the devices listed below. There are no construction differences between the 2 sites.					
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	
<input checked="" type="checkbox"/> No Change		<input checked="" type="checkbox"/> No Change		<input checked="" type="checkbox"/> No Change	
				IEC 62474	
				<input checked="" type="checkbox"/> No Change	
Changes to product identification resulting from this PCN:					
Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City		
JCAP	JCP	CHN	Jiangyin		
TI Chengdu	CDA	CHN	Chengdu		
Sample product shipping label (not actual product label)					

Product Affected:			
AFE4460YBGR	AFE4500YBGR	AFE4960PYBGR	TLV62585DRLR
AFE4460YBGT	AFE4500YBGT	AFE4960PYBGT	TLV62585DRLT
AFE4500SYBGR	AFE4950YBGR	AFE4960YBGR	TLV62585PDRLR
AFE4500SYBGT	AFE4950YBGT	AFE4960YBGT	TLV62585PDRLT

Qualification Report

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: SN2001088YBGR	QBS Reference: TMP117AIYBGR	QBS Reference: TMP117MAIYBGR	QBS Reference: TMP117NAIYBGR	QBS Reference: TMP117AIYBGR	QBS Reference: TMP117AIDVR
HAST	A2	Biased HAST	110C/85%RH	264 Hours	3/231/0	-	-	-	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	3/231/0	-	-	-	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	-	-	-	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	3/231/0	-	-	-	-	-
HTOL	B1	Life Test	150C	300 Hours	-	-	-	-	-	3/231/0
ELFR	B2	ELFR	125C	48 Hours	-	-	-	-	1/1000/0	-
ESD	E2	ESD CDM	-	1000 Volts	3/9/0	-	-	-	-	-
ESD	E2	ESD HBM	-	2000 Volts	3/9/0	-	-	-	-	-
LU	E4	Latch-Up	Per JESD78	-	3/18/0	-	-	-	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	3/90/0	-	-	-	-	-

QBS: Qual By Similarity

Qual Device SN2001088YBGR 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

Qualification Report

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS562231DRLR
ED	Electrical Characterization, side by side	(per datasheet)	Pass
FLAM	Flammability (UL-1694)	-	3/15/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0
HTOL	Life Test, 125C	1000 Hours	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0
LFA	Lead Finish Adhesion	Leads	3/45/0
LI	Lead Fatigue	Leads	3/54/0
LI	Lead Pull	Leads	3/72/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass
PD	Physical Dimensions	(per mechanical drawing)	3/15/0
SA	Salt Atmosphere	24 Hrs	3/66/0
SD	Solderability	Pb Free	3/66/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	3/231/0
VM	Visual / Mechanical	-	3/984/0

- Qual Device TPS562231DRLR is qualified at LEVEL1-260CG
- 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 Change Management team or your local Field Sales Representative.

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