




<b>PCN Number:</b>	20230612001.1		<b>PCN Date:</b>	June 12, 2023
<b>Title:</b>	Qualification of TI Chengdu as an additional Assembly site 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>	Sept 14, 2023	<b>Sample requests accepted until:</b>	July 14, 2023*	
*Sample requests received after (July 14, 2023) will not be supported.				
<b>Change Type:</b>				
<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 checked="" 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 checked="" type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/> Test Process	<input type="checkbox"/> Wafer Fab Process		
<b>PCN Details</b>				
<b>Description of Change:</b>				
Texas Instruments Incorporated is announcing the qualification of TI Chengdu ( TI CDAT) as an additional Assembly site for select devices. Material differences between sites are as follows:				
<b>Group 1 device:</b>				
	<b>TFME</b>	<b>HNA</b>	<b>TI CDAT</b>	
Wire type	0.8mil Au	0.8mil Au	<a href="#">0.8mil Cu</a>	
Mount Compound	A-09	400194	<a href="#">4226215</a>	
Mold compound	R-27	450179	<a href="#">4222198</a>	
<b>Group 2 device:</b>				
	<b>TFME</b>	<b>HNA</b>	<b>TI CDAT</b>	
Wire type	0.8mil Au	0.8mil Au	<a href="#">0.8mil Cu</a>	
Mount Compound	A-03	400180	<a href="#">4226215</a>	
Mold compound	R-27	450179	<a href="#">4222198</a>	
<b>Reason for Change:</b>				
Continuity of supply				
<b>Anticipated impact on Fit, Form, 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	
<b>Changes to product identification resulting from this PCN:</b>				
<b>Assembly Site</b>	<b>Assembly Site Origin (22L)</b>	<b>Assembly Country Code (23L)</b>	<b>Assembly City</b>	
TFME	NFM	CHN	Chongchuan Road	
Hana Technologies	HNT	THA	Ayutthaya	
<a href="#">TI Chengdu</a>	<a href="#">CDA</a>	<a href="#">CHN</a>	<a href="#">Chengdu</a>	
Sample product shipping label ( <b>not actual product label</b> )				

<div>    </div> <div> <p>MADE IN: Malaysia 2DC: 20:</p> <p>MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04</p> <p>OPT: 39 ITEM: LBL: 5A (L)T0:1750</p> </div> <div> <p>(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483SI2</p> <p>(P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CC0: USA (22L) AS0: MLA (23L) AC0: MYS</p> </div>			
<b>Product Affected Group 1:</b>			
DRV5055A1QDBZR	DRV5055A3QDBZR	DRV5055Z1QDBZR	DRV5055Z3QDBZR
DRV5055A1QDBZT	DRV5055A3QDBZT	DRV5055Z1QDBZT	DRV5055Z3QDBZT
DRV5055A2QDBZR	DRV5055A4QDBZR	DRV5055Z2QDBZR	DRV5055Z4QDBZR
DRV5055A2QDBZT	DRV5055A4QDBZT	DRV5055Z2QDBZT	DRV5055Z4QDBZT
<b>Product Affected Group 2:</b>			
DRV5056A1QDBZR	DRV5056A6QDBZT	DRV5057A1QDBZR	DRV5057Z1QDBZT
DRV5056A1QDBZT	DRV5056Z1QDBZR	DRV5057A1QDBZT	DRV5057Z2QDBZR
DRV5056A2QDBZR	DRV5056Z1QDBZT	DRV5057A2QDBZR	DRV5057Z2QDBZT
DRV5056A2QDBZT	DRV5056Z2QDBZR	DRV5057A2QDBZT	DRV5057Z3QDBZR
DRV5056A3QDBZR	DRV5056Z2QDBZT	DRV5057A3QDBZR	DRV5057Z3QDBZT
DRV5056A3QDBZT	DRV5056Z3QDBZR	DRV5057A3QDBZT	DRV5057Z4QDBZR
DRV5056A4QDBZR	DRV5056Z3QDBZT	DRV5057A4QDBZR	DRV5057Z4QDBZT
DRV5056A4QDBZT	DRV5056Z4QDBZR	DRV5057A4QDBZT	
DRV5056A6QDBZR	DRV5056Z4QDBZT	DRV5057Z1QDBZR	

## Qualification Report

Approve Date 05-JUNE-2023

### Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: DRV5055A1QDBZR	Qual Device: DRV5056A1QDBZR	Qual Device: DRV5057A1QDBZR	QBS Reference: SN74HCS595QDYYRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	-	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	-	-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB- Free Solder;	-	1/22/0	-	-	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	-	3/30/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	-

ESD	E2	ESD CDM	-	500 Volts	-	-	-	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	-	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	-	-	1/6/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	1/30/0	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	-	3/90/0

QBS: Qual By Similarity

Qual Device DRV5055A1QDBZR is qualified at MSL1 260C

Qual Device DRV5056A1QDBZR is qualified at MSL1 260C

Qual Device DRV5057A1QDBZR 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/>

For questions regarding this notice, e-mails can be sent to Change Management team or your local Field Sales Representative.

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