

PCN# 20180423002 Qualify New Assembly Material set for Selected Device(s) Change Notification / Sample Request

Date: May 09, 2018 To: TOKYO ELECTRON DEVICE (DSTR) PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (<u>PCN ww admin team@list.ti.com</u>).

Sincerely,

PCN Team SC Business Services

20180423002 Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE

CUSTOMER PART NUMBER

OPA564AIDWP TPA1517DWPR THS6012IDWP DRV401AIDWP DRV401AIDWPR TPA6120A2DWPR

null
null

Technical details of this Product Change follow on the next page(s).

PC	N Number:	2018	80423002			PCN	D	ate:	May 9, 201	18
Title: Qualify New Asse			nbly Materia	al set for Sel	ected Dev	vice(s))			
Cus	stomer Contact:	PCN A	Aanager	Dept:	uality Ser	rvices				
Proposed 1 st Ship Date:			Aug. 9, 20		Estimat	Estimated Sample Availability:				vided at equest
Cha	ange Type:									
	Assembly Site			Design				Wafer Bu		
				Data Sheet	Wafer Bump Material					
Assembly Materials				Part number change Test Site			┽┼	Wafer Bump Process Wafer Fab Site		
Mechanical Specification				Test Proces	<u> </u>		╡┼		b Materials	:
Packing/Shipping/Labeling				10000	5		it		b Process	,
				PCN De	tails					
Des	scription of Chang	e:								
	ices listed in "Produ piece part changes		ollows:		Devices wi	ill rem			ent assemb	ly facility
	Material			rrent				roposed		
	Mount Compour			4, 4206201				1208458		
	Mold Compound			05443				4211649		
Lead finish					Roughened NiPdAu (Single si			ingle cide)		
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Qualification Report HSOIC G700LB + FS849 Enterprise Qualification in TITL

Approve Date 11-Apr-2018

Product Attributes

Attributes	Qual Device: <u>DRV401AIDWPR</u>	QBS Package Reference: <u>TPS653853QDCARQ1</u>
Assembly Site	TAI	TAI
Package Family	HSOIC	HTSSOP
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	DMO5S	RFAB/DMOS6 (MFF)
Wafer Fab Process	50HPA07	LBC8

- QBS: Qual By Similarity

- Qual Device DRV401AIDWPR is qualified at LEVEL2-260C

Data Displayed as: Number of lots / Total sample size / Total failed					
Туре	Test Name / Condition	Duration	Qual Device: <u>DRV401AIDWPR</u>	QBS Package Reference: <u>TPS653853QDCARQ1</u>	
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	
CDM	ESD - CDM - Q100	1000 V corner pins only	-	1/3/0	
CDM	ESD - CDM - Q100	750 V (all pins)	-	1/3/0	
ED	Auto Electrical Distributions	Cpk>1.67 Room, hot, and cold test	-	1/90/0	
ELFR	Early Life Failure Rate, 125C	48 Hours	-	3/2400/0	
ELFR	Early Life Failure Rate, 150C	48 Hours	-	1/805/0	
HAST	Biased HAST, 130C/85%RH	192 Hours (for information)	-	3/231/0	
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/231/0	
HBM	ESD - HBM - Q100	2000 V	-	1/3/0	
HTOL	Life Test, 125C	1000 Hours	-	3/231/0	
HTSL	High Temp Storage Bake 150C	1000 Hours	-	3/231/0	
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	-	
LI	Lead Integrity	Leads	3/135/0	-	
LI	Lead Pull	Leads	3/135/0	-	
LU	Latch-up	(per JESD78)	-	1/6/0	
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	-	
MQ	Manufacturability (Auto Assembly)	(per automotive requirements)	-	Pass	
PD	Physical Dimension	-	3/90/0	-	
PTC	Power Temperature Cycle, - 40/125C	1000 cycles	-	1/47/0	
SD	Surface Mount Solderability	>95% Lead Coverage	3/66/0	-	
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	
TC	Temperature Cycle, -65/150C	1000 Cycles	-	3/231/0	
WBP	Post Temp. Cycle Bond Pull	500 Cycles	-	3/15/0	
WBP	Bond Pull	Wires	3/228/0	-	
WBS	Ball Bond Shear	Wires	3/228/0	-	

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

- 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

THIS INFORMATION RELATING TO QUALITY AND RELIABILITY IS PROVIDED "AS IS." Product information detailed in this report may not accurately reflect TI's current product materials, processes and testing used in the construction of the TI products. Customers are solely responsible to conduct sufficient engineering and additional qualification testing to determine whether a device is suitable for use in their applications. Using TI products outside limits stated in TI's datasheet may void TI's warranty. See TI's Terms of Sale at "http://www.ti.com/lsds/ti/legal/termsofsale.page"

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

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