PCN Number: 20			2023	231213001.1			PCN Date:		e:	December 21, 2023			
Title: Qualification of ad				ditional Assembly sites for select HSOIC devices									
Customer Contact:				Change Management Team De			De	ept: Q		Qι	ality Services		
Proposed 1 st Ship Date:				Mar 20, 2024 Sample accept		ple i cept	requests J		Ja	n 21, 2024 *			
*Sample requests received after Jan 21, 2024 will not be supported.													
Change Type:													
Assembly Site						Design			Wafer Bump Material				
	Ass	embly Process	5			Data	a Sheet				Wa	fer l	Bump Process
\square	Ass	embly Materia	ls			Part	number	change			Wa	Wafer Fab Site	
	Me	chanical Speci	ficatio	า		Test	Site				Wa	fer l	Fab Material
\boxtimes	Pac	king/Shipping	/Label	ing		Tes	Process			Wafer Fab Process			
						PC	N Deta	ils					
Des	cript	ion of Chang	e:										
devices listed below in the product affected section. Construction information and all assembly sites are as follows: HSOIC Build sites							and all assembly						
Assembly Sites				FMX, ASESHAT, AP1, HNA, TITL					L				
Mold Compound			4	4211880, SID#EN2000509, SID#EN20000519, SID#101379294, SID#450207, SID#450042, 4211649, 4205443									
Mount Compound				4223772, 4147858, 4224264, SID#EY2000030, SID#EY1000063, SID#EY1000102, SID#101375281, SID#400728, 4042504, 4208458									
Le	LeadFrame Finish			NiPdAu, Matte Sn									

Upon expiration of this PCN, TI will combine lead free solutions in a single <u>standard part</u> <u>number</u>, for example; <u>DRV8871DDAR</u> – can ship with both Matte Sn and NiPdAu. When available customers may specify NiPdAu finish by ordering the part with the G4 suffix, e.g. **DRV8871DDAR**."

Cu, Au

Reason for Change:

Bond Wire

Continuity of Supply

Anticipated impact on Fit, Form, 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					
Image Image Image Image		🛛 🛛 No Change	🛛 No Change					
Changes to product identification resulting from this PCN:								
Assembly Sites								
HNA	Assembly Site Origin (2	22L) ASO: HNT						
AP1	Assembly Site Origin (2	22L) ASO: AKR						
ASESH	Assembly Site Origin (2	22L) ASO: ASH						
FMX	Assembly Site Origin (2	22L) ASO: MEX						
	Assembly Site Origin (2	22L) ASO: TAI						
Sample product shipping la	Sample product shipping label (not actual product label) E4/G4: NiPdAu E3/G3: Matte Sn (1P) SN74LS07NSR (Q) 2000 (D) 0226							
MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 03111 LOT: 3959047MLA (4W) TKY (1T) 7523483SI2 (P) OPT: ITEM: 39 LBL: 5A (L)T0:1750 (L)T0:1750								
Product Affected:								
BUF634AIDDAR	SN1106042DDAR	TPS259631DDAR	TPS54332CDDAR					
DRV8871DDAR	SN1110024DDAR	TPS259631DDAT	TPS54334DDA					
LM5012DDAR	SN1208017DDAR	TPS54229DDA	TPS54334DDAR					
LM5013DDAR	SN1208022DDAR	TPS54229DDAR	TPS54339DDA					
LMR38010FDDAR	SN54229EDDAR	TPS54229EDDA	TPS54339DDAR					
LMR38010FSDDAR	THS3491IDDAR	TPS54229EDDAR	TPS54339EDDA					
LMR38010SDDAR	THS3491IDDAT	TPS54239DDA	TPS54339EDDAR					
LMR38020FDDAR	TPS259620DDAR	TPS54239DDAR	TPS566250DDA					
LMR38020FSDDAR	TPS259620DDAT	TPS54239EDDA	TPS566250DDAR					
LMR38020SDDAR	TPS259621DDAR	TPS54239EDDAR	TPS7A7001DDA					
SN1101002DDAR	TPS259621DDAT	TPS54328RDDAR	TPS7A7001DDAR					
SN1106039DDAR	TPS259630DDAR	TPS5432DDA	TPS7A7002DDA					
SN1106041DDAR	TPS259630DDAT	TPS5432DDAR	TPS7A7002DDAR					



TI Information Selective Disclosure

HSOIC Qualification Report

	Stress Test	Duration	FMX DRV8251DDA LM5163DDA	ASESH LMR38020SDDA OPA462IDDA
TC	Temperature Cycling -65/150C Or Temperature Cycling -55/125C	500 Cycles Or 700 Cycles	3/231/0	3/231/0
HAS T/TH B	Biased HAST 130C/85%RH Or Biased HAST 110C/85%RH Or Temperature Humidity Bias, 85C/85%RH	96 hours Or 264 hours Or 1000 hours	3/231/0	3/231/0
HTSL	High Temp. Storage Bake 150C Or High Temp. Storage Bake 170C	1000 hours Or 420 hours	3/231/0	3/231/0
UHA ST/A C	Unbiased HAST, 130C/85%RH Or Autoclave 121C	96 hours	3/231/0	3/231/0
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0	3/66/0
MQ	Manufacturability	-	Pass	Pass

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

	Stress Test	Duration	HNA OPA454AIDDA OPA2211AIDDA	TITL TPA1517DWP OPA564AQDWPRQ 1
TC	Temperature Cycling -65/150C Or Temperature Cycling -55/125C	500 Cycles Or 700 Cycles	3/231/0	3/231/0
HAS T/TH B	Biased HAST 130C/85%RH Or Biased HAST 110C/85%RH Or Temperature Humidity Bias, 85C/85%RH	96 hours Or 264 hours Or 1000 hours	3/231/0	3/231/0
HTSL	High Temp. Storage Bake 150C Or High Temp. Storage Bake 170C	1000 hours Or 420 hours	3/231/0	3/231/0
UHA ST/A C	Unbiased HAST, 130C/85%RH Or Autoclave 121C	96 hours	3/231/0	3/231/0
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0	3/66/0
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	AP1 TPS54327DDA THS6052IDDA
TC	Temperat ure Cycling -65/150C Or Temperat ure Cycling -55/125C	500 Cycles Or 700 Cycles	3/231/0
HAST /THB	Biased HAST 130C/85%RH Or Biased HAST 110C/85%RH Or Temperature Humidity Bias, 85C/85%RH	96 hours Or 264 hours Or 1000 hours	3/231/0
HTSL	High Temp. Storage Bake 150C Or High Temp. Storage Bake 170C	1000 hours Or 420 hours	3/231/0
UHA	Unbiased HAST, 130C/85%RH	96 hours	3/231/0

	Stress Test	Duration	AP1 TPS54327DDA THS6052IDDA
ST/A C	Or Autoclave 121C		
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0
MQ	Manufacturability	-	Pass

Device THS6052IDDA qualified at L1-260C MSL rating

Devices TPS54327DDA, LMR38020SDDA, LM5163DDA, OPA454AIDDA, OPA2211AIDDA, TPA1517DWP, OPA462IDDA qualified at L2-260C MSL rating

Devices DRV8251DDA, OPA564AQDWPRQ1, qualified at L3-260C MSL rating

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, and HTSL, as applicable - The following are equivalent HTSL options based on activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours

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 Change Management team or your local Field Sales Representative.

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