PCN Number:		20201204001.1				PCN Date: Mar 10, 2021			Mar 10, 2021	
Qualification		of TI Malaysia (TIM) as an additional Ass					,			
Title: devices										
Customer C	ontact: P	<u>CN Manager</u>		Dept: Quality						
Proposed 1 st Ship Date:		June 10,	June 10, 20		Estimated Availabilit	imated Sample ailability:			Date Provided at Sample request	
Change Type:										
Assemb				Design Wafer Bump Site				er Bump Site		
	ly Process				Data Sheet			Wafer Bump Material		
Assembly Materials					er change				Nafer Bump Process	
Mechanical Specificati									er Fab Site	
Packing	eling 📃 Test Proce		SS L			Wafer Fab Materials				
								Wafer Fab Process		
Description	of Changes			PCN De	talls					
Description	of Change:									
Texas Instruments Incorporated is announcing the qualification TI Malaysia (TIM) as Additional Assembly & test Site for select devices listed in the "Product Affected" Section. No material differences between sites.										
Assembly Si	te Assembly	Site Origin Assem		Assembly Co	Country Code		Assembly S		oly Site City	
TI Taiwan	Т	AI		TW	'N	Ch	านทรู	g Ho,	New Taipei City	
TI Malaysia	M	LA		MY	΄ <mark>S</mark>			Kuala	a Lumpur	
Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.										
Reason for	Change:									
Continuity of	supply									
Anticipated	impact on F	orm, Fit, I	Fun	iction, Qua	lity or Relia	abili	ty ((posi	itive / negative):	
None										
Anticipated	impact on M	aterial De	ecla	aration						
No Impact to the Material Declaration			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 at the site link below http://www.ti.com/quality/docs/materialcontentsearch.tsp							
Changes to product identification resulting from this PCN:										
Assembly Site										
TI-Taiwan			Assembly Site Origin (22L)				ASO: TAI			
TI Malaysia Assembly Site Origin (22L) ASO: MLA					ASO: MLA					
Sample product shipping label (not actual product label)										
TEXAS INSTRUMENTS 2DC: 221:G4(1P) SN74LS07NSRMADE IN: Malaysia 2DC: 221:(Q) 2000(D) 0336MSL '2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04(A) 1000000000000000000000000000000000000										

Product Affected:			
UCC21520ADW	UCC21520ADWR	UCC21520DW	UCC21520DWR

Qualification Report

Approved Date 05-Mar-2021

Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: <u>UCC21520ADW</u>	QBS Product Reference: <u>UCC21520ADWR</u>	QBS Product & Package Reference: <u>UCC21520AQDWRQ1</u>
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0
CDM	ESD - CDM	1500 V	1/3/0	-	-
CDM	ESD - CDM - Q100	1500 V	-	-	1/3/0
ED Auto Electrical Distributions		Cpk>1.67 Room, hot, and cold test	-	-	3/90/0
ED	ED Electrical Characterization Per Datasheet Paramet		1/30/0	-	-
HAST Biased HAST, 130C/85%RH		96 Hours	3/231/0	3/231/0	3/231/0
HBM ESD - HBM		4000 V	1/3/0	-	-
HTOL	Life Test, 125C	1000 Hours	1/77/0	1/77/0	1/77/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	3/231/0	-
HTSL	SL High Temp Storage Bake 500 Hours		3/135/0	-	3/135/0
тс	C Temperature Cycle, - 65/150C 500 Hours		3/231/0	3/231/0	3/231/0
YLD	YLD FTY and Bin Summary -		3/Pass	-	-

- QBS: Qual By Similarity

- Qual Device UCC21520ADW is qualified at LEVEL3-260C

- Device UCC21520ADW contains multiple dies.

- 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

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