PCN Number:			20	20190318003.1							<b>PCN Date:</b> Mar 19, 2019			
Title		Qualification		of A	of ASESH as Additional Assembly and Test Site for Select SOI									
IItie		Devi	ces											
<b>Customer Cont</b>			tact:	t: <u>PCN Mana</u>			ger Dept: Quality Serv			ces	ces			
Proposed 1 <sup>st</sup> Ship Date			:e:	June 1	19, 2	2019 Estimated Samp Availability:		ole	Date Provided at Sample request					
Char	ige Ty	ype:												
	Asser	nbly s	Site				Des	gn	ו 🗌			Wafer Bump Site		
	Assembly Process				Data Sheet					Wafer Bump Material				
Assembly Materials			;			_ Part number change					Wafer Bump Process			
Mechanical Specific											Water Fab Site			
				Labe	ang		Test Process				Wafer Fab Process			
Desc	rintic	on of	Change	<u>.</u>			r C	n Deu	1115					
Теха	s Insti	rume	nts Inco	rpor	ated is	anr	ouncir	a the au	alification /	ASE	SH	as Additional Assembly and		
Test	Site fo	or sel	ect devi	ces	listed in	n the	e "Prod	uct Affe	cted" Sectio	n.	Cu	rrent assembly sites and		
Mate	rial di	fferer	nces are	as f	ollows.							,		
Ass	embly	Site	Assem	bly S	Site Origin		Asser	bly Cou	Iy Country Code		As	sembly Site City		
TI	Malay	sia		MLA				MYS	MYS			Kuala Lumpur		
	ASESH	1		AS	H			CHN				Shanghai		
Material Differences:														
				TI Malay			sia		ASESH					
M	Mount Compound			414785			8 EY1000063							
Ν	1old co	ompo	und	d 42			11880		EN2000509					
	Lead	l finis	h	NiPdAu			u Matte Sn							
11					<b>T</b> T							all and an effect of the set		
Upon	expir	ation			, II WII	I COR	ndine i	ead free	SOLUTIONS II	nas Sn	sin	gie <u>standard part</u> d NiPdAu, When available		
custo	mers	may	snecify	NiPd	Δu fini	<u>sh</u> -	v orde	ing the	part with th	JA G	ан 34 с	suffix e a		
TMP	<b>1075</b>	DRG4	<b>1</b> ,″			511 0	y orac	ing the				Junix, e.g.		
Test	covera	age, i	nsertion	is, c	onditio	ns w	ill rem	ain cons	istent with	curr	en	t testing and verified with		
test l	MQ.													
Reas	son fo	or Cha	ange:											
Conti	inuity	of su	pply.											
Anti	cipate	ed im	pact or	ו Fo	rm, Fit	t, Fı	Inctio	, Quali	ty or Relia	bilit	ty	(positive / negative):		
None														
Anticipated impact on Material Declaration														
□ No Impact to the □ Material Declarations or Product Content reports are driven from														
I	Material Declaration production data and will be available following the product					e following the production								
				release. Upon production release the revised reports can be										
				obtained from the <u>TI Eco-Info website</u> . There is no impact to the										
material meeting current regulatory compliance requ							compliance requirements							
Changes to product identification reculting from this PCP														
Changes to product identification resulting from this PCN:														
Assembly Site														
TI-Malaysia						As	sembly	Site Ori	ite Origin (22L)			ASO: MLA		
ASESH						As	sembly	Site Origin (22L)			ASO: ASH			



## **Qualification Report**

Approve Date 20-Dec-2018

## **Qualification Results**

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

Туре	Test Name / Condition	Duration	Qual Device: <u>TMP1075D</u>	QBS Product Reference: <u>TMP1075DGKT</u>	QBS Package Reference: <u>TLIN2029DQ1</u>
HTOL	Life Test, 150C	300 Hours	-	3/231/0	
HAST	Biased HAST, 130C/85%RH	96 Hours	1/77/0	-	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	1/77/0	-	3/231/0
TC	Temperature Cycle, - 65/150C	500 Cycles	1/77/0	-	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	1/77/0	-	-
HBM	ESD - HBM	4000V	-	1/3/0	-
CDM	ESD - CDM	1500 V	1/3/0	-	-
LU	Latch-up	(per JESD78)	-	1/6/0	
ED	Electrical Characterization	Per Datasheet Parameters	1/30/0	-	-
WBP	Bond Pull	Wires	1/76/0	-	-
WBS	Ball Bond Shear	Wires	1/76/0	-	-

- QBS: Qual By Similarity

- Qual Device TMP1075D is qualified at LEVEL1-260C

- 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

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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