<b>PCN Number:</b> 20220804000.1								PCN Date:		Augu	st 04, 2022		
Title: Qualification of TI Malays				sia a	a as an additional			l assembly site for select Devices					
Customer Contact: PCN Manager					Dept:			Quality Services					
Proposed 1 <sup>st</sup> Ship Date: Nov 4				1, 2	, 2022			Sample requests accepted until:					
*Sampl	*Sample requests received after Sept 4, 2022 will not be supported.												
Change	Type:												
	,				Design						Wafer Bump Site		
	Assembly Process			Щ	Data Sheet				Wafer Bump Material				
	Assembly Materials			Н	Part number change			ange			Wafer Bump Process Wafer Fab Site		
	Mechanical Specification			H	Test Site						Wafer Fab Materials		
☐ Packing/Shipping/Labeling			ΙШ	☐ Test Process			+	_	Wafer Fab Process				
					PCN Details			<u> </u>	wai	Traici Tub Tioccaa			
Descrip	tion of Ch	nange:					<del>ctu.</del>						
	y site for										sia as an altei nstruction diff		
					UTI	L <b>2</b>		TI Mala			ysia		
Mount Compou			nd		SID#PZ0013			4147858			3		
Bond wire composition/diam			ameter	Au, 1.3mil				Cu, 1.3 mil or 1			1.0 mil		
Mold Compound			d	SID#CZ0239			9	4211880			)		
	Reason for Change:												
	ontinuity												
-	ated impa	ict on	Form, Fit	, Fu	nction	, Qua	ality	or Reliabil	ity	(posi	tive / negativ	/e):	
None													
Impact	on Enviro	nmen	tal Rating	S									
											mentation of tl ed environmen		
RoHS			R	REACH				Green Status			IEC 62474		
No Change			No Ch	ange			X N	No Change					
Change	s to prod		entificatio			_							
Assem	bly Site	Ass	embly Site (22L)	Or	Origin Assem			nbly Country Code (23L)			Assembly City		
U	ΓL2		NS2					THA			Bangpakong		
M	LA		MLA		MYS					Kuala Lumpur			
Sample	product sh	nipping	label (no	t a	ctual pr	oduc	t lab	el)					

TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 2Q:

(1P) SN74LS07NSR (a) 2000 (D) 0336 (31T)LOT: 3959047MLA 4W) TKY(1T) 7523483S12

(P) (2P) REV:

(20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MVE (23L) ACO: MYS

OPT: ITEM:

(L)T0:3750 5A

MSL 2 /260C/1 YEAR SEAL DT

MSL 1 /235C/UNLIM 03/29/04

# **Product Affected:**

DRV134PA	OPA177GP	SN65HVD1780P	SN65HVD1785P	
INA134PA	OPA445AP	SN65HVD1781P	SN65HVD1786P	
OPA134PA	OPA551PA	SN65HVD1782P	UCC3804N	
OPA177FP				

TI Information Selective Disclosure

## **Qualification Report** Approve Date 01-August-2022

#### Qualification Results

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

Туре	#	Test Name	Condition	Duration	QBS Reference: ADC0832CCN/NOPB	QBS Reference: LM231AN/NOPB	QBS Reference: <u>LM2594HVN-</u> <u>ADJ/NOPB</u>	QBS Reference: LMC6482IN/NOPB
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-		3/231/0	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	3/231/0	3/231/0	3/231/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	3/231/0	3/231/0	3/231/0	3/231/0
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	3/228/0	3/228/0	3/228/0	3/228/0
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	3/228/0	3/228/0	3/228/0	3/228/0
PD	C4	Physical Dimensions	(per mechanical drawing)	-	3/15/0	3/15/0	3/15/0	3/15/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	1/30/0	1/30/0

- QBS: Qual By Similarity
- 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 Tl's external Web site: http://www.ti.com/

## Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

TI Qualification ID: R-CHG-2204-078

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

Location	E-Mail					
WW Change Management Team	PCN www admin team@list.ti.com					

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