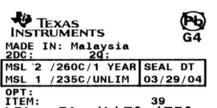
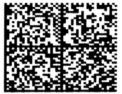
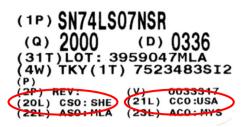
		2020	200908001.1				PCN Date: S			Sep 14, 2020		
<b>Title:</b> Qualification of RF/ for select devices				AB as an additional Fab site option & bond wire diame					neter reduction			
<b>Customer Contact:</b>			<u> </u>	PCN Manager							Quality Services	
<b>Proposed 1<sup>st</sup> Ship Date:</b>			: [	Dec 14, 2020							Date provided at sample request.	
Change Type:												
	nbly Sit	e		Assembly Process				Assembly Materials				
Design				Electrical Specification				$\perp$	Mechanical Specification			
Test Site				Packing/Shipping/Labeling				+ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$	<ul><li>Test Process</li><li>Wafer Bump Process</li></ul>			
<ul><li>Wafer Bump Site</li><li>✓ Wafer Fab Site</li></ul>				X	<ul><li>■ Wafer Bump Material</li><li>▼ Wafer Fab Materials</li></ul>			$+ \bowtie$	Wafer Fab Process			
∠   Wale	1 40 31	le		4	Part number change				Walei	Tau	) FIUCESS	
				PCN Details								
Descripti	on of C	hange:			ı cıı	<del></del>						
	Texas Instruments is pleased to announce the qualification of RFAB as an additional Fab site option for the selected devices listed below in the product affected section.  Current Fab Site  Additional Fab Site											
Current	Fab	Proc	ess	Т	Wafer	Ad	ditional	P	Process		Wafer	
Site					Diameter		b Site		110003		Diameter	
Vangu	ard	CMC	)S		200 mm		RFAB		LBC9		300 mm	
Additionally, there will be a bo				Current				New				
Boı	nd wire,	'Diamet	er	Cu/(			0.96		Cu/0.80		0.80	
	Qual details are provided in the Qual Data Section.  Reason for Change:											
Continuity	of Sup	ply										
Anticipat	ed imp	act on	Form,	Fit	, Function, Q	ualit	y or Relia	bility	(positi	ve /	/ negative):	
None	Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):  None											
Anticipat	ed imp	act on I	Materi	al	Declaration							
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 from the <u>TI ECO website</u> .								
Changes	Changes to product identification resulting from this PCN:											
Current:												
Current Chip Site   Chip Site			Site O	Origin Code (20L)			p Site Cou	ntry	try Code (21L)		Chip Site City	
Vanguard				VAN			TWN				HSINCHU	
New Fab Site:												
		Site 0	Origin Code (20L)			Chip Site Country Code (2			LL)	Chip Site City		
RFAB			RFB			USA				Richardson		
Sample product shipping label (not actual product label)												



(L)T0:1750





**Product Affected:** 

OPA4374AID OPA4374AIDR OPA4374AIDRG4

# **Qualification Report**

## Approve Date 08-May-2020

#### Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: OPA4374AIDR	QBS Product Reference: <u>TLV9064ID</u>	QBS Process Reference: <u>TLV62568DBV</u>	QBS Package Reference: <u>TLV9054IDR</u>	
AC	Autoclave 121C	96 Hours	-	-	3/231/0	-	
ED	Electrical Characterization	Per Datasheet Parameters	-	Pass	Pass	Pass	
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	3/3000/0	-	
HAST	Biased HAST, 130C/85%RH	96 Hours	-	1/77/0	3/231/0	3/231/0	
HBM	ESD - HBM	4000 V	-	1/3/0	1/3/0	1/3/0	
CDM	ESD - CDM	1500 V	-	1/3/0	2/6/0	1/3/0	
HTOL	Life Test, 150C	300 Hours	-	1/77/0	3/231/0	1/77/0	
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	1/76/0	3/231/0	3/231/0	
LU	Latch-up	(per JESD78)	-	1/6/0	2/12/0	1/6/0	
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	-	Pass	Pass	
TC	Temperature Cycle, -65/150C	500 Cycles	-	1/77/0	3/231/0	3/231/0	
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	1/77/0	-	3/231/0	
WBP	Bond Pull	Wires	1/76/0	-	-	-	
WBS	Ball Bond Shear	Wires	1/76/0	-	-	-	

- QBS: Qual By Similarity
- Qual Device's qualified at LEVEL2-260C: OPA4374AIDR
- 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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