PCN Number:		20131025001B						<b>PCN Date:</b> 05/16/2014			
Title:Transfer of OPA340MDBVTEP and V62/08618-01XE devices (0.60um Process Technology) to the Vanguard Fab Facility						(0.60um Process					
Customer Contact:PCN ManagerPhone:+1(214)480-6037Dept:Quality S					Dept: Quality Services						
*Propos	ate: 11/16/2014					timated Samp ailability:	Date provided at sample request.				
Change	Change Type:										
Assembly Site					Design	sign			Wafer Bump Site		
	embly Process					Data Sheet			Wafer Bump Material		
	embly Materia				Part number change			Wafer Bump Process			
	hanical Specif			<u>Ц</u>	Test Si				Wafer Fab Site		
Pacl	king/Shipping/	'Label	ing		Test Pr	Process			Wafer Fab Materials		
									Wafer Fab Process		
					PCN	De	etails				
Descrip	tion of Chang	je:									
This notification is announce the transfer of OPA340MDBVTEP and V62/08618-01XE devices (0.60um Process Technology) to the Vanguard Fab Facility. These devices are listed in "Product Affected" section.											
Current	ly Qualified Si	tes, P	rocess,	wa	fer dia.	A	dditional Site,	, Pro	ocess, wafer dia.		
TMSC-V	VF2, 0.60UM,	200m	m			V	anguard, VIS	.5U	M/0.6UM DPDM, 200mm		
Qualification details are provided in the Qual Data Section.											
Reason	for Change:										
Continuit	y of Supply										
Anticipa	ted impact o	n For	m, Fit,	Fu	nction,	Qua	ality or Reliab	oility	/ (positive / negative):		
None						-					
	s to product	identi	ificatio	n r	esulting	ı fro	om this PCN:				
Changes to product identification resulting from this PCN:											
Chip Site		Chip site code (20L)				Ch	nip country code	(21L	)		
	MC-WF2		TS2			TWN			<u>,                                     </u>		
New											
	Chip Site Chip site code (20L)				Ch	Chip country code (21L)					
Vanguard (VIS) VAN				TWN							

Sample product shipping label (not actual product label)				
TEXAS INSTRUMENTS 20: 20: MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750	(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483S12 (P) (2P) REV: (V) 0033517 (20L) CS0: SHE (21L) CC0:USA (22L) ASO: MLA (23L) ASO: MTS			

## **Product Affected:**

**OPA340MDBVTEP** 

V62/08618-01XE

## **Qualification Report**

## OPA340 and OPA2336 will transfer from TSMC Fab 2 to Vanguard aka VIS FAB qualified process flow (0.5um/0.6um) model transfer from TSMC FAB2 Approved04/26/2014

## **Product Attributes**

Attributes	Qual Device: OPA2336EA	Qual Device: OPA340NA	QBS Process: DDC112Y	QBS Process: TSC2046IPW	QBS Process: OPA356AQDBVRQ1
Assembly Site	ASESH	NS2	CRS	TAI	NFME
Package Family	VSSOP	SOT	TQFP	TSSOP	SOT
Flammability Rating	UL 94 V-0	UL 94 V-0	UL94 Class V-0	UL94 Class V-0	UL 94 V-0
Wafer Fab Supplier	Vanguard	Vanguard	Vanguard	Vanguard	Vanguard
Wafer Fab Process	0.5/0.6UM	0.5/0.6UM	0.5/0.6UM	0.5/0.6UM	0.5/0.6UM

QBS: Qual By Similarity
Qual Device OPA2336EA is qualified at LEVEL2-260C
Qual Device OPA340NA is qualified at LEVEL1-260C

Test Name / Condition	Duration	Qual Device: OPA2336EA	Qual Device: OPA340NA	QBS Process: DDC112Y	QBS Process: TSC2046IPW	QBS Process: OPA356AQDBVRQ1
Biased HAST, 130C/85%RH	96 Hours	-	-	1/77/0	1/77/0	2/154/0
Autoclave 121C	96 Hours	-	-	1/77/0	1/77/0	2/154/0
Unbiased HAST 130C/85%RH	nbiased HAST 96 Hours		-	-	-	1/77/0
Temperature Cycle, - 65/150C			-	1/77/0	1/77/0	2/153/0
High Temp Storage Bake 500 Hours		-	-	-	-	1/45/0
High Temp Storage Bake 150C				1/77/0	-	-
High Temp Storage Bake 170C			-	-	1/77/0	-
Life Test, 150C	1000 Hours	-	-	1/116/0	-	-
Life Test, 125C	1000 Hours	-	-	-	-	2/158/0
Early Life Failure Rate, 125C	48 Hours	-	-	-	-	3/2400/0
ESD - HBM	1000 V	1/3/0	1/3/0	1/3/0	1/3/0	-
ESD - CDM	250 V	1/3/0	1/3/0	1/3/0	1/3/0	1/3/0
Latch-up	(per JESD78)	1/6/0	1/6/0	1/6/0	-	1/6/0
Electrical Distributions	Cpk>1.67 Room, hot, and cold test	-	-	-	-	1/90/0
Electrical Per Datasheet Characterization Parameters		1/Pass	1/Pass	1/Pass	1/Pass	-

- 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

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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USA	PCNAmericasContact@list.ti.com
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