

<b>PCN Number:</b>	20170201000		<b>PCN Date:</b>	Feb 3 2017	
<b>Title:</b>	Qualification of a new Die Attach Film (DAF) for Select Devices				
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services		
<b>Proposed 1<sup>st</sup> Ship Date:</b>	May 3 2017	<b>Estimated Sample Availability:</b>	Date provided at sample request		
<b>Change Type:</b>					
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Site
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Materials
				<input type="checkbox"/>	Wafer Fab Process
<b>PCN Details</b>					
<b>Description of Change:</b>					
This notification is to announce the qualification of a new die attach film (DAF) for the devices in the product affected section below as follows:					
		<b>Current</b>	<b>Proposed</b>		
		SID#PZ0078	SID#PZ0084		
<b>Reason for Change:</b>					
DAF Supplier change no longer producing current material					
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>					
None					
<b>Anticipated impact on Material Declaration</b>					
<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	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 <a href="#">TI ECO website</a> .		
<b>Changes to product identification resulting from this PCN:</b>					
None					
<b>Product Affected:</b>					
OPA1S2384IDRCR	OPA1S2384IDRCT	OPA1S2385IDRCR	OPA1S2385IDRCT		

### Qualification Report

**Change manufacturing of DAF type and supplier from PZ0078 to PZ0084  
Approve Date 14-Dec-2016**

#### Product Attributes

Attributes	Qual Device: OPA1S2384IDRC
Assembly Site	UTAC
Package Family	VSON
Flammability Rating	UL 94 V-0
Wafer Fab Supplier	TSMC / FFAB
Wafer Fab Process	0.6UM DPDM / ASLC10

- QBS: Qual By Similarity
- Qual Device OPA1S2384IDRC is qualified at LEVEL2-260C
- Device OPA1S2384IDRC contains multiple dies.

#### Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: OPA1S2384IDRC
AC	Autoclave 121C	96 Hours	3/231/0
DS	Die Shear	-	3/30/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0
XRAY	X-ray	(top side only)	3/15/0

- 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 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.

Location	E-Mail
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>