

Supplier Name: **Texas Instruments Inc. (DUNS# 00-732-1904)**
 Contact Info: ti.com/support
 Form/Declaration Type: **Distribute - RoHS and IEC 62474 DB**
 Created on: **08/26/2022**

Details for "OPA132U"

Current Product Information

TI part number	Lead finish/Ball material	MSL rating/peak reflow	Assembly site	Package Pins	Package body size (mm)	Total device mass (mg)*
OPA132U		Level-3-260C-168 HR	TI MALAYSIA A/T	D 8	3.91x4.9x1.58	87

***Total Device Mass**

The summary mass is a rounded value and will be within approximately +/- 10% of the detailed mass value.

Environmental Ratings Information

RoHS	REACH	Green	IEC 62474 DB
Yes	Yes	Yes	Yes

Component Information

Component	Substance	CAS Number	Amount (mg)	Homogeneous Material Level		Component Level	
				Percentage %	ppm	Percentage %	ppm
Bond Wire							
Precious Metals	Gold	7440-57-5	0.110817	99.376749	993767	0.127428	1274
Precious Metals	Palladium	7440-05-3	0.000694	0.622355	6224	0.000798	8
Precious Metals	Silver	7440-22-4	0.000001	0.000897	9	0.000001	0
Sub-Total			0.111512	100	1000000	0.128228	1282
Die Attach Adhesive							
Other Inorganic Materials	Silica	7631-86-9	0.016548	1.999959	20000	0.019029	190
Precious Metals	Silver	7440-22-4	0.570918	69.000033	690000	0.656499	6565
Thermoplastics	Epoxy	85954-11-6	0.239951	29.000008	290000	0.27592	2759
Sub-Total			0.827417	100	1000000	0.951447	9514
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	23.902152	97.52	975200	27.485087	274851
Copper and Its Alloys	Iron	7439-89-6	0.56373	2.3	23000	0.648233	6482
Copper and Its Alloys	Phosphorus	7723-14-0	0.007353	0.03	300	0.008455	85
Zinc and Its Alloys	Zinc	7440-66-6	0.036765	0.15	1500	0.042276	423
Sub-Total			24.51	100	1000000	28.184051	281841
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.9512	95.12	951200	1.093785	10938
Precious Metals	Gold	7440-57-5	0.0078	0.78	7800	0.008969	90
Precious Metals	Palladium	7440-05-3	0.041	4.1	41000	0.047146	471
Sub-Total			1	100	1000000	1.1499	11499
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	49.71413	86.000001	860000	57.166283	571663
Other Plastics and Rubber	Carbon Black	1333-86-4	0.173421	0.299999	3000	0.199417	1994
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	0.317939	0.55	5500	0.365598	3656
Thermoplastics	Epoxy	85954-11-6	7.601637	13.15	131500	8.741123	87411
Sub-Total			57.807127	100	1000000	66.472421	664724
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	2.708021	100	1000000	3.113954	31140
Sub-Total			2.708021	100	1000000	3.113954	31140
Total			86.964077			100	1000000

Important Note

The ppm calculations are at the **homogeneous material** level and are maximum concentration values. The ppm displayed represents the **homogeneous material** with the highest ppm for that substance. The amount (mg) calculations represent the maximum total amount of each substance within the component.

The ppm calculations are at the **component** level and are average concentration values. The amount (mg) calculations represent the average total amount of each substance within the **component**.

[See Glossary of Terms for more details.](#)

Important Part Information

There is a remote possibility the Customer Part Number (CPN) your company uses could reference more than one TI part number. This is due to two or more users (EMSI's or subcontractors) using the same CPN for different TI part numbers. If this occurs, please check your Customer Part Number and cross reference it with the TI part number seen on this page.

Product Content Methodology

[For an explanation of the methods used to determine material weights, See Product Content Methodology](#)

Material Declaration Certificate for Semiconductor IC Packaged Products

TI certifies that the material content information provided by TI is representative and accurate to the best of their knowledge based on material information provided by its suppliers and their combination into finished IC packaged materials. Where designed to be soldered at high temperatures, TI semiconductor products labeled as "RoHS Compliant" are suitable for use in specified lead-free processes. TI may also reference these types of semiconductor products as "Pb-Free." These TI semiconductor products are also fully compliant with GADSL and the IEC 62474 database for electronic requirements.

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[Signature: \(click here for a fuller statement with a signed certificate\)](#)

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 For further environmental statements, please go to www.ti.com/ecoinfo
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RoHS: Means TI semiconductor products that are compliant with the current RoHS requirement that the maximum concentration values of the ten substances listed in RoHS Annex II do not exceed 0.1 % by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI semiconductor products labeled as "RoHS Compliant" are suitable for use in specified lead-free processes. TI may also reference these types of semiconductor products as "Pb-Free." These TI semiconductor products are also fully compliant with GADSL and the IEC 62474 database for electronic requirements.

RoHS Exempt: Means TI semiconductor products that contain lead (Pb) above the RoHS Annex II threshold, but that fall within one of the specific RoHS exemptions noted above or documented in <http://www.ti.com/lit/pdf/szzq088>

Green: Means the content of Chlorine (Cl) and Bromine (Br)-based flame retardants meet J5709B low halogen requirements of <=1 000ppm threshold; Antimony trioxide (Sb2O3) contained in halogen based flame retardant materials meets the <=1 000ppm threshold requirement; and Beryllium Oxide (BeO) is <=1000ppm.