

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: 06/04/2022

Details for "OPA202IDGKR"

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)*
OPA202IDGKR	NIPDAUAG	Level-2-260C-1 YEAR	Ext-Mfg	DGK 8	3x3x1	28.8

*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							
Copper and Its Alloys	Copper	7440-50-8	0.025205	96.622709	966227	0.087405	874
Precious Metals	Gold	7440-57-5	0.000084	0.322012	3220	0.000291	3
Precious Metals	Palladium	7440-05-3	0.000797	3.055279	30553	0.002764	28
Sub-Total			0.026086	100	1000000	0.09046	905
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.07945	82.000206	820002	0.275514	2755
Thermoplastics	Epoxy	85954-11-6	0.01744	17.999794	179998	0.060478	605
Sub-Total			0.09689	100	1000000	0.335991	3360
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	12.844283	96.719006	967190	44.540913	445409
Magnesium and Its Alloys	Magnesium	7439-95-4	0.00664	0.05	500	0.023026	230
Nickel and Its Alloys	Nickel	7440-02-0	0.39508	2.975	29750	1.370043	13700
Other Inorganic Materials	Silicon	7440-21-3	0.032934	0.247997	2480	0.114207	1142
Precious Metals	Silver	7440-22-4	0.001062	0.007997	80	0.003683	37
Sub-Total			13.279999	100	1000000	46.051872	460519
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.183897	97.3	973000	0.637711	6377
Precious Metals	Gold	7440-57-5	0.000567	0.3	3000	0.001966	20
Precious Metals	Palladium	7440-05-3	0.003969	2.1	21000	0.013764	138
Precious Metals	Silver	7440-22-4	0.000567	0.3	3000	0.001966	20
Sub-Total			0.189	100	1000000	0.655407	6554
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	13.13361	87.7	877000	45.54423	455442
Other Plastics and Rubber	Carbon Black	1333-86-4	0.044927	0.300001	3000	0.155796	1558
Thermoplastics	Epoxy	85954-11-6	1.797073	11.999999	120000	6.231821	62318
Sub-Total			14.97561	100	1000000	51.931847	519318
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	0.26946	100	1000000	0.934423	9344
Sub-Total			0.26946	100	1000000	0.934423	9344
Total			28.837045			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 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 products. TI semiconductor products designated to be "Pb-free", "Green" or "RoHS Exempt" fully meets the latest EU RoHS Directive requirements along with other legislation as seen in the former JIG-101 list that has been transferred to the IEC 62474 database.

Important Information/Disclaimer

TI bases its material content information on information provided by third-party suppliers and has taken, and continues to take, reasonably diligent steps to provide any required or available information. TI may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. TI and TI suppliers may consider certain information to be proprietary, and thus certain information may not be available for release by TI. The material content information is provided by TI "as is."

[For additional information, please contact TI customer support.](#)

[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.