

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: **05/06/2022**

Details for "TLC2252AIP"

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)*
TLC2252AIP	NIPDAU	Level-NC-NC-NC	TI AGUASCALIENTES	P 8	6.35x9.81x4.57	671.7

***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	0.046098	99.997831	999978	0.006863	69
Precious Metals	Silver	7440-22-4	0.000001	0.002169	22	0	0
Sub-Total			0.046099	100	1000000	0.006863	69
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.237715	79.000017	790000	0.035391	354
Thermoplastics	Epoxy	85954-11-6	0.06319	20.999983	210000	0.009408	94
Sub-Total			0.300905	100	1000000	0.044799	448
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	206.966889	97.05	970500	30.813416	308134
Copper and Its Alloys	Iron	7439-89-6	5.544708	2.6	26000	0.825501	8255
Copper and Its Alloys	Phosphorus	7723-14-0	0.319887	0.15	1500	0.047625	476
Zinc and Its Alloys	Zinc	7440-66-6	0.426516	0.2	2000	0.0635	635
Sub-Total			213.258	100	1000000	31.750042	317500
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.703888	95.12	951200	0.104795	1048
Precious Metals	Gold	7440-57-5	0.005772	0.78	7800	0.000859	9
Precious Metals	Palladium	7440-05-3	0.03034	4.1	41000	0.004517	45
Sub-Total			0.74	100	1000000	0.110172	1102
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	401.489971	88	880000	59.774186	597742
Other Plastics and Rubber	Carbon Black	1333-86-4	1.368716	0.3	3000	0.203776	2038
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	2.509312	0.55	5500	0.373589	3736
Thermoplastics	Epoxy	85954-11-6	50.870604	11.15	111500	7.573661	75737
Sub-Total			456.238603	100	1000000	67.925212	679252
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	1.094245	100	1000000	0.162912	1629
Sub-Total			1.094245	100	1000000	0.162912	1629
Total			671.677852			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
 Created on: 05/06/2022

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 JS709B 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.