

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: 06/08/2022

Details for "TLV2172IDR"

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)*
TLV2172IDR	NIPDAU	Level-2-260C-1 YEAR	TI MALAYSIA A/T	D 8	4.9x3.9x1.75	101.4

***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							
Other Nonferrous Metals and Alloys	Yttrium	7440-65-5	0.000001	0.001245	12	0.000001	0
Precious Metals	Gold	7440-57-5	0.08031	99.99751	999975	0.079195	792
Precious Metals	Silver	7440-22-4	0.000001	0.001245	12	0.000001	0
Sub-Total			0.080312	100	1000000	0.079197	792
Die Attach Adhesive							
Other Inorganic Materials	Silica	7631-86-9	0.006548	2.000024	20000	0.006457	65
Precious Metals	Silver	7440-22-4	0.225903	68.999927	689999	0.222766	2228
Thermoplastics	Epoxy	85954-11-6	0.094945	29.000049	290000	0.093627	936
Sub-Total			0.327396	100	1000000	0.32285	3228
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	37.624655	97.701	977010	37.102195	371022
Copper and Its Alloys	Iron	7439-89-6	0.824114	2.14	21400	0.81267	8127
Copper and Its Alloys	Phosphorus	7723-14-0	0.012708	0.032999	330	0.012532	125
Zinc and Its Alloys	Zinc	7440-66-6	0.048523	0.126001	1260	0.047849	478
Sub-Total			38.51	100	1000000	37.975246	379752
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	1.864352	95.12	951200	1.838463	18385
Precious Metals	Gold	7440-57-5	0.015288	0.78	7800	0.015076	151
Precious Metals	Palladium	7440-05-3	0.08036	4.1	41000	0.079244	792
Sub-Total			1.96	100	1000000	1.932783	19328
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	51.134685	86	860000	50.424624	504246
Other Plastics and Rubber	Carbon Black	1333-86-4	0.178377	0.3	3000	0.1759	1759
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	0.327024	0.55	5500	0.322483	3225
Thermoplastics	Epoxy	85954-11-6	7.81885	13.15	131500	7.710277	77103
Sub-Total			59.458936	100	1000000	58.633283	586333
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	1.07152	100	1000000	1.056641	10566
Sub-Total			1.07152	100	1000000	1.056641	10566
Total			101.408164			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 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/eoinfo
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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.