

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: 05/09/2022

Details for "TLV2211IDBVTG4"

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)*
TLV2211IDBVTG4	NIPDAU	Level-1-260C-UNLIM	Ext-Mfg	DBV 5	1.60X2.90X1.45	15.5

*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	0.028251	100	1000000	0.182659	1827
Sub-Total			0.028251	100	1000000	0.182659	1827
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.108387	75	750000	0.700784	7008
Thermoplastics	Epoxy	85954-11-6	0.036129	25	250000	0.233595	2336
Sub-Total			0.144516	100	1000000	0.934378	9344
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	2.932731	99.279993	992800	18.961776	189618
Other Nonferrous Metals and Alloys	Chromium	7440-47-3	0.007385	0.25	2500	0.047748	477
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.007385	0.25	2500	0.047748	477
Zinc and Its Alloys	Zinc	7440-66-6	0.006499	0.220007	2200	0.04202	420
Sub-Total			2.954	100	1000000	19.099292	190993
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.180728	95.12	951200	1.168509	11685
Precious Metals	Gold	7440-57-5	0.001482	0.78	7800	0.009582	96
Precious Metals	Palladium	7440-05-3	0.00779	4.1	41000	0.050367	504
Sub-Total			0.19	100	1000000	1.228458	12285
Mold Compound							
Other inorganic Materials	Fused Silica	60676-86-0	9.891307	85.000006	850000	63.952931	639529
Other Plastics and Rubber	Carbon Black	1333-86-4	0.03491	0.299996	3000	0.225713	2257
Thermoplastics	Epoxy	85954-11-6	1.710614	14.699999	147000	11.060093	110601
Sub-Total			11.636831	100	1000000	75.238738	752387
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	0.512944	100	1000000	3.316475	33165
Sub-Total			0.512944	100	1000000	3.316475	33165
Total			15.466542			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: \(click here for a fuller statement with a signed certificate\)](#)

Name/Title: Hubie Payne, Vice President, Worldwide SC Quality
 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 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.