

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 "TLV1117IKVURG3"

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)*
TLV1117IKVURG3	SN	Level-3-260C-168 HR	Ext-Mfg	KVU 3	6.6x5.2x2.3	332.4

***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							
Copper and Its Alloys	Copper	7440-50-8	0.195249	99.992318	999923	0.058735	587
Copper and Its Alloys	Iron	7439-89-6	0.000002	0.001024	10	0.000001	0
Nickel and Its Alloys	Nickel	7440-02-0	0.000003	0.001536	15	0.000001	0
Other Nonferrous Metals and Alloys	Manganese	7439-96-5	0.000002	0.001024	10	0.000001	0
Precious Metals	Silver	7440-22-4	0.000008	0.004097	41	0.000002	0
Sub-Total			0.195264	100	1000000	0.05874	587
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.463796	76.299931	762999	0.13952	1395
Thermoplastics	Epoxy	85954-11-6	0.144063	23.700069	237001	0.043337	433
Sub-Total			0.607859	100	1000000	0.182857	1829
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	196.805712	99.874	998740	59.203285	592033
Copper and Its Alloys	Iron	7439-89-6	0.187201	0.095	950	0.056314	563
Copper and Its Alloys	Phosphorus	7723-14-0	0.061087	0.031	310	0.018376	184
Sub-Total			197.054	100	1000000	59.277975	592780
Lead Frame Plating							
Other Nonferrous Metals and Alloys	Tin	7440-31-5	11.6071	100	1000000	3.491659	34917
Sub-Total			11.6071	100	1000000	3.491659	34917
Mold Compound							
Other Inorganic Materials	Aluminum Nitride	24304-00-5	0.205251	0.17	1700	0.061744	617
Other Inorganic Materials	Fused Silica	60676-86-0	107.768886	89.26	892600	32.419141	324191
Other Plastics and Rubber	Carbon Black	1333-86-4	0.265619	0.22	2200	0.079904	799
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	1.71445	1.42	14200	0.515743	5157
Thermoplastics	Epoxy	85954-11-6	10.781718	8.93	89300	3.243367	32434
Sub-Total			120.735924	100	1000000	36.319898	363199
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	2.223487	100	1000000	0.668872	6689
Sub-Total			2.223487	100	1000000	0.668872	6689
Total			332.423634			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 (EMSIs 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/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 JS709B low halogen requirements of <=1 000ppm threshold; Antimony trioxide (Sb203) contained in halogen based flame retardant materials meets the <=1 000ppm threshold requirement; and Beryllium Oxide (BeO) is <=1000ppm.