

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 "TLV1117-18IDRJR"

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)*
TLV1117-18IDRJR	NIPDAU	Level-2-260C-1 YEAR	TI MALAYSIA A/T	DRJ 8	4.0x4.0x0.75	34.9

***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	Calcium	7440-70-2	0.000001	0.000325	3	0.000003	0
Other Nonferrous Metals and Alloys	Rhenium	7440-15-5	0.000009	0.002921	29	0.000026	0
Precious Metals	Gold	7440-57-5	0.30812	99.99643	999964	0.882972	8830
Precious Metals	Palladium	7440-05-3	0.000001	0.000325	3	0.000003	0
Sub-Total			0.308131	100	1000000	0.883003	8830
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.594468	81.100018	811000	1.703552	17036
Thermoplastics	Epoxy	85954-11-6	0.138538	18.899982	189000	0.397005	3970
Sub-Total			0.733006	100	1000000	2.100557	21006
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	15.667605	99.25	992500	44.898263	448983
Other Nonferrous Metals and Alloys	Chromium	7440-47-3	0.041044	0.260003	2600	0.117619	1176
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.039465	0.25	2500	0.113094	1131
Zinc and Its Alloys	Zinc	7440-66-6	0.037886	0.239997	2400	0.108569	1086
Sub-Total			15.786	100	1000000	45.237545	452375
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.270141	95.12007	951201	0.774136	7741
Precious Metals	Gold	7440-57-5	0.002215	0.77993	7799	0.006347	63
Precious Metals	Palladium	7440-05-3	0.011644	4.1	41000	0.033368	334
Sub-Total			0.284	100	1000000	0.813852	8139
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	14.655635	90.499999	905000	41.998286	419983
Other Plastics and Rubber	Carbon Black	1333-86-4	0.08097	0.499998	5000	0.232034	2320
Thermoplastics	Epoxy	85954-11-6	1.457467	9.000003	90000	4.176627	41766
Sub-Total			16.194072	100	1000000	46.406947	464069
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	1.590584	100	1000000	4.558097	45581
Sub-Total			1.590584	100	1000000	4.558097	45581
Total			34.895793			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: \(click here for a fuller statement with a signed certificate\)](#)

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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 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.