

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 "LM2902KAVQDRQ1"

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)*
LM2902KAVQDRQ1	NIPDAU	Level-1-260C-UNLIM	TI AGUASCALIENTES	D 14	3.91X8.65X1.58	194.8

***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	0.081798	97.586524	975865	0.04199	420
Not Categorized	Proprietary Materials		0.000009	0.010737	107	0.000005	0
Precious Metals	Palladium	7440-05-3	0.002012	2.400353	24004	0.001033	10
Precious Metals	Silver	7440-22-4	0.000002	0.002386	24	0.000001	0
Sub-Total			0.083821	100	1000000	0.043028	430
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.344004	79.000018	790000	0.17659	1766
Thermoplastics	Epoxy	85954-11-6	0.091444	20.999982	210000	0.046942	469
Sub-Total			0.435448	100	1000000	0.223532	2235
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	83.052479	97.049999	970500	42.633956	426340
Copper and Its Alloys	Iron	7439-89-6	2.225002	2.6	26000	1.142177	11422
Copper and Its Alloys	Phosphorus	7723-14-0	0.128366	0.150001	1500	0.065895	659
Zinc and Its Alloys	Zinc	7440-66-6	0.171154	0.2	2000	0.08786	879
Sub-Total			85.577001	100	1000000	43.929888	439299
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.283458	95.120134	951201	0.14551	1455
Precious Metals	Gold	7440-57-5	0.002324	0.779866	7799	0.001193	12
Precious Metals	Palladium	7440-05-3	0.012218	4.1	41000	0.006272	63
Sub-Total			0.298	100	1000000	0.152975	1530
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	94.006713	88	880000	48.257176	482572
Other Plastics and Rubber	Carbon Black	1333-86-4	0.320477	0.3	3000	0.164513	1645
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	0.587542	0.55	5500	0.301607	3016
Thermoplastics	Epoxy	85954-11-6	11.911078	11.15	111500	6.114404	61144
Sub-Total			106.82581	100	1000000	54.8377	548377
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	1.583513	100	1000000	0.812877	8129
Sub-Total			1.583513	100	1000000	0.812877	8129
Total			194.803593			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 for 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
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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.