

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: 05/30/2022

Details for "DS90UB941ASRTDTQ1"

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)*
DS90UB941ASRTDTQ1	NIPDAUAG	Level-3-260C-168 HR	Ext-Mfg	RTD 64	9x9x0.88	223.1

***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	0.562508	95.965907	959659	0.252098	2521
Precious Metals	Gold	7440-57-5	0.001875	0.319882	3199	0.00084	8
Precious Metals	Palladium	7440-05-3	0.021771	3.714212	37142	0.009757	98
Sub-Total			0.586154	100	1000000	0.262695	2627
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	2.536733	84.000007	840000	1.13688	11369
Thermoplastics	Epoxy	85954-11-6	0.483187	15.999993	160000	0.216548	2165
Sub-Total			3.01992	100	1000000	1.353429	13534
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	107.614708	97.654	976540	48.229367	482294
Copper and Its Alloys	Iron	7439-89-6	2.54562	2.31	23100	1.140863	11409
Copper and Its Alloys	Phosphorus	7723-14-0	0.031958	0.029	290	0.014323	143
Precious Metals	Gold	7440-57-5	0.004408	0.004	40	0.001976	20
Precious Metals	Silver	7440-22-4	0.003306	0.003	30	0.001482	15
Sub-Total			110.2	100	1000000	49.38801	493880
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.31136	97.3	973000	0.139541	1395
Precious Metals	Gold	7440-57-5	0.00096	0.3	3000	0.00043	4
Precious Metals	Palladium	7440-05-3	0.00672	2.1	21000	0.003012	30
Precious Metals	Silver	7440-22-4	0.00096	0.3	3000	0.00043	4
Sub-Total			0.32	100	1000000	0.143413	1434
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	87.573081	87	870000	39.24737	392474
Other Plastics and Rubber	Carbon Black	1333-86-4	0.503294	0.5	5000	0.22556	2256
Thermoplastics	Epoxy	85954-11-6	12.582339	12.5	125000	5.63899	56390
Sub-Total			100.658714	100	1000000	45.111919	451119
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	8.346294	100	1000000	3.740534	37405
Sub-Total			8.346294	100	1000000	3.740534	37405
Total			223.131082			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 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.