

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 "INA2133UE4"

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)*
INA2133UE4		Level-3-260C-168 HR	TI MALAYSIA A/T	D 14	3.91X8.65X1.58	181.9

*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	Yttrium	7440-65-5	0.000001	0.000537	5	0.000001	0
Precious Metals	Gold	7440-57-5	0.186067	99.998388	999984	0.102274	1023
Precious Metals	Silver	7440-22-4	0.000002	0.001075	11	0.000001	0
Sub-Total			0.18607	100	1000000	0.102276	1023
Die Attach Adhesive							
Other Inorganic Materials	Silica	7631-86-9	0.026146	1.999969	20000	0.014371	144
Precious Metals	Silver	7440-22-4	0.902051	69.000015	690000	0.495823	4958
Thermoplastics	Epoxy	85954-11-6	0.379123	29.000015	290000	0.208389	2084
Sub-Total			1.30732	100	1000000	0.718583	7186
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	73.03125	97.248577	972486	40.142463	401425
Copper and Its Alloys	Iron	7439-89-6	1.95	2.596624	25966	1.07184	10718
Copper and Its Alloys	Phosphorus	7723-14-0	0.01125	0.014981	150	0.006184	62
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.0075	0.009987	100	0.004122	41
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.0225	0.029961	300	0.012367	124
Zinc and Its Alloys	Zinc	7440-66-6	0.075	0.09987	999	0.041225	412
Sub-Total			75.0975	100	1000000	41.278201	412782
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	4.37552	95.12	951200	2.405055	24051
Precious Metals	Gold	7440-57-5	0.03588	0.78	7800	0.019722	197
Precious Metals	Palladium	7440-05-3	0.1886	4.1	41000	0.103666	1037
Sub-Total			4.6	100	1000000	2.528443	25284
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	82.914777	85.999999	860000	45.575056	455751
Other Plastics and Rubber	Carbon Black	1333-86-4	0.289238	0.3	3000	0.158983	1590
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	0.530269	0.55	5500	0.291468	2915
Thermoplastics	Epoxy	85954-11-6	12.678248	13.15	131500	6.968744	69687
Sub-Total			96.412532	100	1000000	52.994252	529943
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	4.326747	100	1000000	2.378246	23782
Sub-Total			4.326747	100	1000000	2.378246	23782
Total			181.930169			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: \(click here for a fuller statement with a signed certificate\)](#)

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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.