

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: 06/07/2022

Details for "TAS5613APHD"

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)*
TAS5613APHD	NIPDAU	Level-3-260C-168 HR	TI TAIWAN A/T	PHD 64	14x14x1	595

*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							
Aluminum and Its Alloys	Aluminum	7429-90-5	0.000007	0.000147	1	0.000001	0
Copper and Its Alloys	Copper	7440-50-8	4.749897	99.997263	999973	0.798253	7983
Copper and Its Alloys	Iron	7439-89-6	0.000021	0.000442	4	0.000004	0
Other Inorganic Materials	Sulfur	7704-34-9	0.000003	0.000063	1	0.000003	0
Other Nonferrous Metals and Alloys	Calcium	7440-70-2	0.000016	0.000337	3	0.000003	0
Precious Metals	Silver	7440-22-4	0.000083	0.001747	17	0.000014	0
Sub-Total			4.750027	100	1000000	0.798275	7983
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	3.927949	84.500006	845000	0.660119	6601
Thermoplastics	Epoxy	85954-11-6	0.720511	15.499994	155000	0.121087	1211
Sub-Total			4.64846	100	1000000	0.781206	7812
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	227.2216	97.52	975200	38.186156	381862
Copper and Its Alloys	Iron	7439-89-6	5.359	2.3	23000	0.900617	9006
Copper and Its Alloys	Phosphorus	7723-14-0	0.0699	0.03	300	0.011747	117
Zinc and Its Alloys	Zinc	7440-66-6	0.3495	0.15	1500	0.058736	587
Sub-Total			233	100	1000000	39.157256	391573
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	10.17784	95.12	951200	1.710456	17105
Precious Metals	Gold	7440-57-5	0.08346	0.78	7800	0.014026	140
Precious Metals	Palladium	7440-05-3	0.4387	4.1	41000	0.073727	737
Sub-Total			10.7	100	1000000	1.798209	17982
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	288.510985	88	880000	48.48626	484863
Other Plastics and Rubber	Carbon Black	1333-86-4	1.311414	0.4	4000	0.220392	2204
Thermoplastics	Epoxy	85954-11-6	38.030993	11.6	116000	6.391371	63914
Sub-Total			327.853392	100	1000000	55.098023	550980
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	14.084705	100	1000000	2.367032	23670
Sub-Total			14.084705	100	1000000	2.367032	23670
Total			595.036584			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/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/szsq088>

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.