

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: **05/28/2022**

Details for "CC2533F32RHAT"

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)*
CC2533F32RHAT	NIPDAU	Level-3-260C-168 HR	TI PHILIPPINES CLARK A/T	RHA 40	6x6x0.9	105.8

*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	0.200008	97.534904	975349	0.189107	1891
Nickel and Its Alloys	Nickel	7440-02-0	0.000001	0.000488	5	0.000001	0
Not Categorized	Proprietary Materials		0.000023	0.011216	112	0.000022	0
Precious Metals	Gold	7440-57-5	0.000105	0.051204	512	0.000099	1
Precious Metals	Palladium	7440-05-3	0.00492	2.399263	23993	0.004652	47
Precious Metals	Silver	7440-22-4	0.000006	0.002926	29	0.000006	0
Sub-Total			0.205063	100	1000000	0.193887	1939
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	1.587344	80	800000	1.500833	15008
Thermoplastics	Epoxy	85954-11-6	0.396836	20	200000	0.375208	3752
Sub-Total			1.98418	100	1000000	1.876041	18760
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	52.18565	99.25	992500	49.341491	493415
Other Nonferrous Metals and Alloys	Chromium	7440-47-3	0.136708	0.26	2600	0.129257	1293
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.13145	0.25	2500	0.124286	1243
Zinc and Its Alloys	Zinc	7440-66-6	0.126192	0.24	2400	0.119314	1193
Sub-Total			52.58	100	1000000	49.714349	497143
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.899835	95.119979	951200	0.850793	8508
Precious Metals	Gold	7440-57-5	0.007379	0.780021	7800	0.006977	70
Precious Metals	Palladium	7440-05-3	0.038786	4.1	41000	0.036672	367
Sub-Total			0.946	100	1000000	0.894442	8944
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	38.614179	88	880000	36.509676	365097
Other Organic Materials	Chlorine	7782-50-5	0.000439	0.001	10	0.000415	4
Other Plastics and Rubber	Carbon Black	1333-86-4	0.131639	0.299999	3000	0.124465	1245
Thermoplastics	Epoxy	85954-11-6	5.133492	11.699	116990	4.853713	48537
Sub-Total			43.879749	100	1000000	41.488268	414883
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	6.169242	100	1000000	5.833013	58330
Sub-Total			6.169242	100	1000000	5.833013	58330
Total			105.764234			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 (EMSLs 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
 Created on: 05/28/2022

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.