

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: 08/28/2022

Details for "TUSB1046AI-DCIRNQR"

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)*
TUSB1046AI-DCIRNQR	NIPDAU	Level-1-260C-UNLIM	TI Semiconductor	RNQ 40	4x6x0.8	74

***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	0.27443	97.585867	975859	0.370628	3706
Nickel and Its Alloys	Nickel	7440-02-0	0.000001	0.000356	4	0.000001	0
Not Categorized	Proprietary Materials		0.000031	0.011023	110	0.000042	0
Precious Metals	Palladium	7440-05-3	0.006749	2.399909	23999	0.009115	91
Precious Metals	Silver	7440-22-4	0.000008	0.002845	28	0.000011	0
Sub-Total			0.281219	100	1000000	0.379797	3798
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.794954	80.00004	800000	1.073614	10736
Thermoplastics	Epoxy	85954-11-6	0.198738	19.99996	200000	0.268403	2684
Sub-Total			0.993692	100	1000000	1.342017	13420
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	41.9336	97.52	975200	56.632861	566329
Copper and Its Alloys	Iron	7439-89-6	0.989	2.3	23000	1.335681	13357
Copper and Its Alloys	Phosphorus	7723-14-0	0.0129	0.03	300	0.017422	174
Zinc and Its Alloys	Zinc	7440-66-6	0.0645	0.15	1500	0.08711	871
Sub-Total			43	100	1000000	58.073074	580731
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	1.23656	95.12	951200	1.67002	16700
Precious Metals	Gold	7440-57-5	0.01014	0.78	7800	0.013694	137
Precious Metals	Palladium	7440-05-3	0.0533	4.1	41000	0.071984	720
Sub-Total			1.3	100	1000000	1.755698	17557
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	23.118602	87.999999	880000	31.222518	312225
Other Organic Materials	Chlorine	7782-50-5	0.000263	0.001001	10	0.000355	4
Other Plastics and Rubber	Carbon Black	1333-86-4	0.078813	0.299998	3000	0.10644	1064
Thermoplastics	Epoxy	85954-11-6	3.073461	11.699002	116990	4.150822	41508
Sub-Total			26.271139	100	1000000	35.480135	354801
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	2.198593	100	1000000	2.96928	29693
Sub-Total			2.198593	100	1000000	2.96928	29693
Total			74.044643			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."
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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 J5709B 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.