

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: **06/12/2022**

Details for "TUSB212QRWBRQ1"

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)*
TUSB212QRWBRQ1	NIPDAU	Level-2-260C-1 YEAR	Ext-Mfg	RWB 12	1.6x1.6x0.5	3.6

*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							
Precious Metals	Gold	7440-57-5	0.031583	99.996834	999968	0.875643	8756
Precious Metals	Palladium	7440-05-3	0.000001	0.003166	32	0.000028	0
Sub-Total			0.031584	100	1000000	0.875671	8757
Die Attach Adhesive							
Other Inorganic Materials	Inorganic Filler		0.000737	1.000176	10002	0.020433	204
Other Inorganic Materials	Silica	7631-86-9	0.010316	13.999756	139998	0.286012	2860
Thermoplastics	Epoxy	85954-11-6	0.062634	85.000068	850001	1.736536	17365
Sub-Total			0.073687	100	1000000	2.042982	20430
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	1.442556	97.47	974700	39.995054	399951
Copper and Its Alloys	Iron	7439-89-6	0.033744	2.28	22800	0.935557	9356
Copper and Its Alloys	Phosphorus	7723-14-0	0.00148	0.1	1000	0.041033	410
Zinc and Its Alloys	Zinc	7440-66-6	0.00222	0.15	1500	0.06155	615
Sub-Total			1.48	100	1000000	41.033194	410332
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.019024	95.12	951200	0.527443	5274
Precious Metals	Gold	7440-57-5	0.000156	0.78	7800	0.004325	43
Precious Metals	Palladium	7440-05-3	0.00082	4.1	41000	0.022735	227
Sub-Total			0.02	100	1000000	0.554503	5545
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	1.580757	89.999983	900000	43.826695	438267
Other Organic Materials	Proprietary Non Halide Flame Retardant	Trade Secret	0.021077	1.200013	12000	0.584363	5844
Other Plastics and Rubber	Carbon Black	1333-86-4	0.008782	0.500001	5000	0.243482	2435
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	0.008782	0.500001	5000	0.243482	2435
Thermoplastics	Epoxy	85954-11-6	0.136999	7.800002	78000	3.798315	37983
Sub-Total			1.756397	100	1000000	48.696337	486963
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	0.245168	100	1000000	6.797315	67973
Sub-Total			0.245168	100	1000000	6.797315	67973
Total			3.606836			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 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.