

Supplier Name: Texas Instruments Inc. (DUNS# 00-732-1904)  
 Contact Info: [ti.com/support](http://ti.com/support)  
 Form/Declaration Type: Distribute - RoHS and IEC 62474 DB  
 Created on: 05/30/2022

Details for "ISO7331CDW"

**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)*
ISO7331CDW	NIPDAU	Level-2-260C-1 YEAR	TI TAIWAN A/T	DW   16	10.3x7.5x2.45	628.8

\*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
<b>Bond Wire</b>							
Copper and Its Alloys	Iron	7439-89-6	0.00001	0.000205	2	0	0
Other Nonferrous Metals and Alloys	Calcium	7440-70-2	0.00001	0.000205	2	0	0
Other Nonferrous Metals and Alloys	Yttrium	7440-65-5	0.00003	0.000614	6	0	0
Precious Metals	Gold	7440-57-5	0.488406	99.997953	999980	0.077671	777
Precious Metals	Silver	7440-22-4	0.000005	0.001024	10	0.000001	0
Sub-Total			0.488416	100	1000000	0.077672	777
<b>Die Attach Adhesive</b>							
Precious Metals	Silver	7440-22-4	0.331216	75.000057	750001	0.052673	527
Thermoplastics	Epoxy	85954-11-6	0.110405	24.999943	249999	0.017558	176
Sub-Total			0.441621	100	1000000	0.070231	702
<b>Die Attach Adhesive 2</b>							
Precious Metals	Silver	7440-22-4	0.380268	75	750000	0.060474	605
Thermoplastics	Epoxy	85954-11-6	0.126756	25	250000	0.020158	202
Sub-Total			0.507024	100	1000000	0.080632	806
<b>Lead Frame</b>							
Copper and Its Alloys	Copper	7440-50-8	272.06698	97.585	975850	43.266609	432666
Copper and Its Alloys	Iron	7439-89-6	6.4124	2.3	23000	1.019759	10198
Copper and Its Alloys	Phosphorus	7723-14-0	0.04182	0.015	150	0.006651	67
Zinc and Its Alloys	Zinc	7440-66-6	0.2788	0.1	1000	0.044337	443
Sub-Total			278.8	100	1000000	44.337356	443374
<b>Lead Frame Plating</b>							
Nickel and Its Alloys	Nickel	7440-02-0	1.279364	95.12	951200	0.203456	2035
Precious Metals	Gold	7440-57-5	0.010491	0.78	7800	0.001668	17
Precious Metals	Palladium	7440-05-3	0.055145	4.1	41000	0.00877	88
Sub-Total			1.345	100	1000000	0.213894	2139
<b>Mold Compound</b>							
Other Inorganic Materials	Fused Silica	60676-86-0	294.373195	86	860000	46.813949	468139
Other Plastics and Rubber	Carbon Black	1333-86-4	1.026883	0.3	3000	0.163304	1633
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	1.882619	0.55	5500	0.299391	2994
Thermoplastics	Epoxy	85954-11-6	45.011715	13.15	131500	7.158179	71582
Sub-Total			342.294412	100	1000000	54.434825	544348
<b>Semiconductor Device</b>							
Ceramics / Glass	Doped Silicon	7440-21-3	2.299084	100	1000000	0.365622	3656
Sub-Total			2.299084	100	1000000	0.365622	3656
<b>Semiconductor Device 2</b>							
Ceramics / Glass	Doped Silicon	7440-21-3	2.639569	100	1000000	0.419769	4198
Sub-Total			2.639569	100	1000000	0.419769	4198
<b>Total</b>			628.815126			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**  
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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](http://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.