

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: 06/10/2022

Details for "TPSS4010MPWPEP"

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)*
TPSS4010MPWPEP	NIPDAU	Level-2-260C-1 YEAR	TI TAIWAN A/T	PWP 28	9.7x4.4x1.0	116.3

***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	Iron	7439-89-6	0.000006	0.000212	2	0.000005	0
Magnesium and Its Alloys	Magnesium	7439-95-4	0.000001	0.000035	0	0.000001	0
Other Nonferrous Metals and Alloys	Beryllium	7440-41-7	0.000003	0.000106	1	0.000003	0
Other Nonferrous Metals and Alloys	Calcium	7440-70-2	0.000007	0.000247	2	0.000006	0
Other Nonferrous Metals and Alloys	Yttrium	7440-65-5	0.00002	0.000706	7	0.000017	0
Precious Metals	Gold	7440-57-5	2.831393	99.997598	999976	2.434679	24347
Precious Metals	Silver	7440-22-4	0.000031	0.001095	11	0.000027	0
Sub-Total			2.831461	100	1000000	2.434737	24347
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	2.591124	85.000005	850000	2.228075	22281
Thermoplastics	Epoxy	85954-11-6	0.457257	14.999995	150000	0.393189	3932
Sub-Total			3.048381	100	1000000	2.621264	26213
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	41.30184	97.41	974100	35.514927	355149
Copper and Its Alloys	Iron	7439-89-6	1.0176	2.4	24000	0.875021	8750
Copper and Its Alloys	Phosphorus	7723-14-0	0.01272	0.03	300	0.010938	109
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.01272	0.03	300	0.010938	109
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.01272	0.03	300	0.010938	109
Zinc and Its Alloys	Zinc	7440-66-6	0.0424	0.1	1000	0.036459	365
Sub-Total			42.4	100	1000000	36.45922	364592
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.722912	95.12	951200	0.621623	6216
Precious Metals	Gold	7440-57-5	0.005928	0.78	7800	0.005097	51
Precious Metals	Palladium	7440-05-3	0.03116	4.1	41000	0.026794	268
Sub-Total			0.76	100	1000000	0.653514	6535
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	50.013136	84.999999	850000	43.005659	430057
Other Nonferrous Metals and Alloys	Metal Oxide	Trade Secret	0.706068	1.2	12000	0.607139	6071
Other Plastics and Rubber	Carbon Black	1333-86-4	0.176517	0.3	3000	0.151785	1518
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	0.176517	0.3	3000	0.151785	1518
Other Plastics and Rubber	Silicone	218163-11-2	1.76517	3.000001	30000	1.517847	15178
Thermoplastics	Epoxy	85954-11-6	6.001576	10.199999	102000	5.160679	51607
Sub-Total			58.838984	100	1000000	50.594894	505949
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	8.415487	100	1000000	7.23637	72364
Sub-Total			8.415487	100	1000000	7.23637	72364
Total			116.294313			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: \(click here for a fuller statement with a signed certificate\)](#)

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 For further environmental statements, please go to www.ti.com/econinfo
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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 JS709B low halogen requirements of <=1 000ppm threshold; Antimony trioxide (Sb203) contained in halogen based flame retardant materials meets the <=1 000ppm threshold requirement; and Beryllium Oxide (BeO) is <=1000ppm.