Texas Instruments Inc. (DUNS# 00-732-1904)
ti.com/support
Distribute - RoHS and IEC 62474 DB
06/10/2022

#### Details for "TPPM0303DG4"

#### **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)*
TPPM0303DG4	NIPDAU	Level-1-260C-UNLIM	TI AGUASCALIENTES	D   8	3.91x4.9x1.58	109.3

#### \*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**

			Homogeneous Material Level		Component Level		
Component	Substance	CAS Number	Amount (mg)	Percentage %	ppm	Percentage %	ppm
Bond Wire							
Copper and Its Alloys	Copper	7440-50-8	0.046755	99.997861	999979	0.042773	428
Precious Metals	Silver	7440-22-4	0.000001	0.002139	21	0.000001	0
Sub-Total			0.046756	100	1000000	0.042774	428
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.266342	78.999947	789999	0.243656	2437
Thermoplastics	Ероху	85954-11-6	0.0708	21.000053	210001	0.06477	648
Sub-Total			0.337142	100	1000000	0.308426	3084
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	46.301585	97.049999	970500	42.35786	423579
Copper and Its Alloys	Iron	7439-89-6	1.240434	2.6	26000	1.13478	11348
Copper and Its Alloys	Phosphorus	7723-14-0	0.071564	0.150001	1500	0.065469	655
Zinc and Its Alloys	Zinc	7440-66-6	0.095418	0.2	2000	0.087291	873
Sub-Total			47.709001	100	1000000	43.6454	436454
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	0.157899	95.11988	951199	0.14445	1444
Precious Metals	Gold	7440-57-5	0.001295	0.78012	7801	0.001185	12
Precious Metals	Palladium	7440-05-3	0.006806	4.1	41000	0.006226	62
Sub-Total			0.166	100	1000000	0.151861	1519
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	52.646502	87.999999	880000	48.162351	481624
Other Plastics and Rubber	Carbon Black	1333-86-4	0.179477	0.3	3000	0.16419	1642
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	0.329041	0.550001	5500	0.301015	3010
Thermoplastics	Ероху	85954-11-6	6.670551	11.15	111500	6.102389	61024
Sub-Total			59.825571	100	1000000	54.729944	547299
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	1.226021	100	1000000	1.121595	11216
Sub-Total			1.226021	100	1000000	1.121595	11216
Total			109.310491			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 (EMSIs 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.

<u>Signature: (click here for a fuller statement with a signed certificate)</u>

Name/Title: Hubie Payne, Vice President, Worldwide SC Quality For further environmental statements, please go to www.ti.com/ecoinfo Created on: 06/10/2022

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 (Sb203) contained in halogen based flame retardant materials meets the <=1 000ppm threshold requirement; and Beryllium Oxide (BeO) is <=1000ppm.