

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: **05/31/2022**

Details for "LM2931ASX-5.0/NOPB"

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)*
LM2931ASX-5.0/NOPB	SN	Level-3-245C-168 HR	Texas Instruments Electronics	KTT 3	10.2 x 9 x 4.5	1452.9

***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
Exempt-7(a)	Affected	Yes	Affected

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	0.111565	100	1000000	0.007679	77
Sub-Total			0.111565	100	1000000	0.007679	77
Die Attach Adhesive							
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.963501	95.499959	955000	0.066315	663
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.020178	1.999996	20000	0.001389	14
Precious Metals	Silver	7440-22-4	0.025223	2.500045	25000	0.001736	17
Sub-Total			1.008902	100	1000000	0.06944	694
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	643.242325	99.55	995500	44.272502	442725
Copper and Its Alloys	Phosphorus	7723-14-0	0.064615	0.01	100	0.004447	44
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.969225	0.15	1500	0.066709	667
Precious Metals	Silver	7440-22-4	1.873835	0.29	2900	0.128971	1290
Sub-Total			646.15	100	1000000	44.472629	444726
Lead Frame Plating							
Other Nonferrous Metals and Alloys	Tin	7440-31-5	12.8	100	1000000	0.880987	8810
Sub-Total			12.8	100	1000000	0.880987	8810
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	704.396242	89	890000	48.481548	484815
Other Nonferrous Metals and Alloys	Metal Hydroxide	Trade Secret	23.743694	3	30000	1.63421	16342
Thermoplastics	Epoxy	85954-11-6	63.316516	8	80000	4.357892	43579
Sub-Total			791.456452	100	1000000	54.47365	544736
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	1.389223	100	1000000	0.095616	956
Sub-Total			1.389223	100	1000000	0.095616	956
Total			1452.916142			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/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/szq088>

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.