

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: 05/31/2022

Details for "LM2937ESX-3.3/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)*
LM2937ESX-3.3/NOPB	SN	Level-3-245C-168 HR	Texas Instruments Electronics	KTT   3	10.2 x 9 x 4.5	1454.4

**\*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
<a href="#">Exempt-7(a)</a>	Affected	Yes	Affected

**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	Copper	7440-50-8	0.158538	99.993062	999931	0.010901	109
Copper and Its Alloys	Iron	7439-89-6	0.000001	0.000631	6	0	0
Nickel and Its Alloys	Nickel	7440-02-0	0.000002	0.001261	13	0	0
Other Inorganic Materials	Sulfur	7704-34-9	0.000001	0.000631	6	0	0
Other Nonferrous Metals and Alloys	Manganese	7439-96-5	0.000002	0.001261	13	0	0
Precious Metals	Silver	7440-22-4	0.000005	0.003154	32	0	0
Sub-Total			0.158549	100	1000000	0.010901	109
<b>Die Attach Adhesive</b>							
Other Nonferrous Metals and Alloys	Lead	7439-92-1	2.322725	95.50003	955000	0.159703	1597
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.048643	1.999982	20000	0.003345	33
Precious Metals	Silver	7440-22-4	0.060804	2.499988	25000	0.004181	42
Sub-Total			2.432172	100	1000000	0.167229	1672
<b>Lead Frame</b>							
Copper and Its Alloys	Copper	7440-50-8	643.242325	99.55	995500	44.227372	442274
Copper and Its Alloys	Phosphorus	7723-14-0	0.064615	0.01	100	0.004443	44
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.969225	0.15	1500	0.066641	666
Precious Metals	Silver	7440-22-4	1.873835	0.29	2900	0.128839	1288
Sub-Total			646.15	100	1000000	44.427295	444273
<b>Lead Frame Plating</b>							
Other Nonferrous Metals and Alloys	Tin	7440-31-5	12.8	100	1000000	0.880089	8801
Sub-Total			12.8	100	1000000	0.880089	8801
<b>Mold Compound</b>							
Other Inorganic Materials	Fused Silica	60676-86-0	702.662986	89	890000	48.312954	483130
Other Nonferrous Metals and Alloys	Metal Hydroxide	Trade Secret	23.685269	3	30000	1.628527	16285
Thermoplastics	Epoxy	85954-11-6	63.160718	8	80000	4.342737	43427
Sub-Total			789.508973	100	1000000	54.284218	542842
<b>Semiconductor Device</b>							
Ceramics / Glass	Doped Silicon	7440-21-3	3.34902	100	1000000	0.230268	2303
Sub-Total			3.34902	100	1000000	0.230268	2303
<b>Total</b>			1454.398714			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**

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](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 JS709B 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.