

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: 08/26/2022

Details for "LM317LMX/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)*
LM317LMX/NOPB	SN	Level-1:260C-UNLIM	Texas Instruments Electronics	D 8	4.9 x 3.9 x 1.75	82.1

***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								
Precious Metals	Gold	7440-57-5	0.033043	100	1000000	0.04023	402	
Sub-Total			0.033043	100	1000000	0.04023	402	
Die Attach Adhesive								
Precious Metals	Silver	7440-22-4	0.223548	75	750000	0.272171	2722	
Thermoplastics	Epoxy	85954-11-6	0.074516	25	250000	0.090724	907	
Sub-Total			0.298064	100	1000000	0.362895	3629	
Lead Frame								
Copper and Its Alloys	Copper	7440-50-8	20.03484	96.6	966000	24.392564	243926	
Copper and Its Alloys	Iron	7439-89-6	0.493612	2.38	23800	0.600976	6010	
Copper and Its Alloys	Phosphorus	7723-14-0	0.006222	0.03	300	0.007575	76	
Precious Metals	Silver	7440-22-4	0.180438	0.87	8700	0.219685	2197	
Zinc and Its Alloys	Zinc	7440-66-6	0.024888	0.12	1200	0.030301	303	
Sub-Total			20.74	100	1000000	25.251101	252511	
Lead Frame Plating								
Other Nonferrous Metals and Alloys	Tin	7440-31-5		1.6	100	1000000	1.948012	19480
Sub-Total				1.6	100	1000000	1.948012	19480
Mold Compound								
Other Inorganic Materials	Fused Silica	60676-86-0	51.488115	89.000001	890000	62.687156	626872	
Other Nonferrous Metals and Alloys	Metal Hydroxide	Trade Secret	1.735554	2.999999	30000	2.11305	21130	
Thermoplastics	Epoxy	85954-11-6	4.628145	8	80000	5.6348	56348	
Sub-Total			57.851814	100	1000000	70.435006	704350	
Semiconductor Device								
Ceramics / Glass	Doped Silicon	7440-21-3		1.61211	100	1000000	1.962756	19628
Sub-Total				1.61211	100	1000000	1.962756	19628
Total			82.135031				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/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.