Supplier Name: Texas Instruments Inc. (DUNS# 00-732-1904)

Contact Info: Form/Declaration Type: ti.com/support
Distribute - RoHS and IEC 62474 DB

Created on: 08/27/2022

## Details for "LM317AMDT"

### **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)*
LM317AMDT	SNPB	Level-1-235C-UNLIM	Texas Instruments Electronics	NDP   3	7.3 x 6.58 x 2.3	329.2

### \*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
No	Affected	Yes	Affected

### Component Information

	Substance	CAS Number	Amount (mg)	Homogeneous Material Level		Component Level	
Component				Percentage %	ppm	Percentage %	ppm
Bond Wire							
Copper and Its Alloys	Copper	7440-50-8	0.198815	99.997485	999975	0.060395	604
Copper and Its Alloys	Iron	7439-89-6	0.000001	0.000503	5	0	0
Other Nonferrous Metals and Alloys	Calcium	7440-70-2	0.000001	0.000503	5	0	0
Precious Metals	Silver	7440-22-4	0.000003	0.001509	15	0.000001	0
Sub-Total			0.19882	100	1000000	0.060397	604
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.502983	75	750000	0.152794	1528
Thermoplastics	Epoxy	85954-11-6	0.167661	25	250000	0.050931	509
Sub-Total			0.670644	100	1000000	0.203725	2037
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	116.30484	96.84	968400	35.330553	353306
Copper and Its Alloys	Iron	7439-89-6	2.87039	2.39	23900	0.871954	8720
Copper and Its Alloys	Phosphorus	7723-14-0	0.03603	0.03	300	0.010945	109
Precious Metals	Silver	7440-22-4	0.74462	0.62	6200	0.226197	2262
Zinc and Its Alloys	Zinc	7440-66-6	0.14412	0.12	1200	0.04378	438
Sub-Total			120.1	100	1000000	36.483429	364834
Lead Frame Plating							
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.864	15	150000	0.262462	2625
Other Nonferrous Metals and Alloys	Tin	7440-31-5	4.896	85	850000	1.487285	14873
Sub-Total			5.76	100	1000000	1.749746	17497
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	177.567412	89	890000	53.940617	539406
Other Nonferrous Metals and Alloys	Metal Hydroxide	Trade Secret	5.985418	3	30000	1.818223	18182
Thermoplastics	Epoxy	85954-11-6	15.961116	8	80000	4.848595	48486
Sub-Total			199.513946	100	1000000	60.607435	606074
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	2.947138	100	1000000	0.895268	8953
Sub-Total			2.947138	100	1000000	0.895268	8953
Total			329.190548			100	1000000

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.

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)

Name/Title: Hubie Payne, Vice President, Worldwide SC Quality For further environmental statements, please go to www.ti.com/ecoinfo Created on: 08/27/2022

luctor 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 15709B low halogen requirements of <=1 000ppm threshold; Antimony trioxide (5b203) contained in halogen based flame retardant materials meets the <=1 000ppm threshold requirement; and Beryllium Oxide (BeO) is <=1000ppm.