

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: **05/28/2022**

Details for "AMS748ABZXEA"

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)*
AMS748ABZXEA		Level-3-250C-168 HR	Ext-Mfg	ABZ 760	23x23x1.06	2242.2

*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
Yes	Yes	Yes	Yes

Component Information

Component	Substance	CAS Number	Amount (mg)	Homogeneous Material Level		Component Level	
				Percentage %	ppm	Percentage %	ppm
Lid							
Copper and Its Alloys	Copper	7440-50-8	1003.1545	96.55	965500	44.740402	447404
Copper and Its Alloys	Iron	7439-89-6	23.897	2.3	23000	1.065799	10658
Nickel and Its Alloys	Nickel	7440-02-0	10.39	1	10000	0.463391	4634
Zinc and Its Alloys	Zinc	7440-66-6	1.5585	0.15	1500	0.069509	695
Sub-Total			1039	100	1000000	46.339101	463391
Lid Attach Adhesive							
Other Inorganic Materials	Aluminum Oxide	1344-28-1	35.493967	80	800000	1.583021	15830
Thermoplastics	Epoxy	85954-11-6	8.873492	20	200000	0.395755	3958
Sub-Total			44.367459	100	1000000	1.978776	19788
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	38.74943	100	1000000	1.728213	17282
Sub-Total			38.74943	100	1000000	1.728213	17282
Solder Ball							
Copper and Its Alloys	Copper	7440-50-8	1.843919	0.5	5000	0.082238	822
Other Nonferrous Metals and Alloys	Tin	7440-31-5	355.876404	96.5	965000	15.871985	158720
Precious Metals	Silver	7440-22-4	11.063515	3	30000	0.49343	4934
Sub-Total			368.783838	100	1000000	16.447653	164477
Solder Bump							
Copper and Its Alloys	Copper	7440-50-8	1.318601	68.459989	684600	0.058809	588
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.59208	30.739997	307400	0.026407	264
Other Nonferrous Metals and Alloys	Titanium	7440-32-6	0.002504	0.130004	1300	0.000112	11
Precious Metals	Silver	7440-22-4	0.012905	0.67001	6700	0.000576	576
Sub-Total			1.92609	100	1000000	0.085903	859
Substrate							
Ceramics / Glass	Random E-Glass	65997-17-3	72.226242	9.76	97600	3.22127	32213
Copper and Its Alloys	Copper	7440-50-8	393.766222	53.21	532100	17.56186	175619
Nickel and Its Alloys	Nickel	7440-02-0	0.074002	0.01	100	0.0033	33
Other Inorganic Materials	Inorganic Filler		54.169681	7.32	73200	2.415952	24160
Other Inorganic Materials	Silica	7631-86-9	0.96203	0.13	1300	0.042906	429
Other Nonferrous Metals and Alloys	Barium Sulfate	7727-43-7	2.960092	0.4	4000	0.132019	1320
Thermoplastics	Epoxy	85954-11-6	215.8647	29.17	291700	9.627503	96275
Sub-Total			740.022969	100	1000000	33.004811	330048
Underfill							
Other Inorganic Materials	Aluminum Nitride	24304-00-5	0.652202	7.000003	70000	0.029088	291
Other Inorganic Materials	Silica	7631-86-9	6.056158	64.999994	650000	0.270103	2701
Other Organic Materials	Proprietary Non Halide Flame Retardant		0.465858	4.999996	50000	0.020777	208
Other Plastics and Rubber	Carbon Black	1333-86-4	0.093172	1.000004	10000	0.004155	42
Thermoplastics	Epoxy	85954-11-6	2.049777	22.000003	220000	0.091419	914
Sub-Total			9.317167	100	1000000	0.415543	4155
Total			2242.166953			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.

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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
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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.