

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: 06/04/2022

Details for "NE5534ADRG4"

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)*
NE5534ADRG4	NIPDAU	Level-2-260C-1 YEAR	TI AGUASCALIENTES	D 8	3.91x4.9x1.58	107.8

*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

				Homogeneous Material Level		Component Level	
Component	Substance	CAS Number	Amount (mg)	Percentage %	ppm	Percentage %	ppm
Bond Wire							
Copper and Its Alloys	Copper	7440-50-8	0.036413	99.997254	999973	0.033785	338
Precious Metals	Silver	7440-22-4	0.000001	0.002746	27	0.000001	0
Sub-Total			0.036414	100	1000000	0.033785	338
Die Attach Adhesive							
Precious Metals	Silver	7440-22-4	0.398091	78.999946	789999	0.369355	3694
Thermoplastics	Epoxy	85954-11-6	0.105822	21.000054	210001	0.098183	982
Sub-Total			0.503913	100	1000000	0.467538	4675
Lead Frame							
Copper and Its Alloys	Copper	7440-50-8	40.49388	96.414	964140	37.570845	375708
Copper and Its Alloys	Iron	7439-89-6	1.092	2.6	26000	1.013174	10132
Copper and Its Alloys	Phosphorus	7723-14-0	0.063	0.15	1500	0.058452	585
Nickel and Its Alloys	Nickel	7440-02-0	0.336	0.8	8000	0.311746	3117
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.0042	0.01	100	0.003897	39
Precious Metals	Gold	7440-57-5	0.0042	0.01	100	0.003897	39
Precious Metals	Palladium	7440-05-3	0.00672	0.016	160	0.006235	62
Sub-Total			42	100	1000000	38.968246	389682
Lead Frame Plating							
Nickel and Its Alloys	Nickel	7440-02-0	3.99504	95.12	951200	3.70666	37067
Precious Metals	Gold	7440-57-5	0.03276	0.78	7800	0.030395	304
Precious Metals	Palladium	7440-05-3	0.1722	4.1	41000	0.15977	1598
Sub-Total			4.2	100	1000000	3.896825	38968
Mold Compound							
Other Inorganic Materials	Fused Silica	60676-86-0	52.102381	88	880000	48.341391	483414
Other Plastics and Rubber	Carbon Black	1333-86-4	0.177622	0.3	3000	0.1648	1648
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	0.32564	0.55	5500	0.302134	3021
Thermoplastics	Epoxy	85954-11-6	6.601608	11.149999	111500	6.125073	61251
Sub-Total			59.207251	100	1000000	54.933399	549334
Semiconductor Device							
Ceramics / Glass	Doped Silicon	7440-21-3	1.832484	100	1000000	1.700207	17002
Sub-Total			1.832484	100	1000000	1.700207	17002
Total			107.780062			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: [\(click here for a fuller statement with a signed certificate\)](#)

Name/Title: Hubie Payne, Vice President, Worldwide SC Quality
For further environmental statements, please go to www.ti.com/ecoinfo
Created on: 06/04/2022

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.