

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: 05/18/2022

Details for "SN65C1168ENSG4"

**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)*
SN65C1168ENSG4	NIPDAU	Level-1-260C-UNLIM	TI MALAYSIA A/T	NS   16	5.3x10.3x1.95	253.4

\*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
Yes	Yes	Yes	Yes

**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	0.10342	99.999033	999990	0.040818	408
Precious Metals	Silver	7440-22-4	0.000001	0.000967	10	0	0
Sub-Total			<b>0.103421</b>	<b>100</b>	<b>1000000</b>	<b>0.040818</b>	<b>408</b>
<b>Die Attach Adhesive</b>							
Precious Metals	Silver	7440-22-4	0.689138	79.999954	800000	0.27199	2720
Thermoplastics	Epoxy	85954-11-6	0.172285	20.000046	200000	0.067998	680
Sub-Total			<b>0.861423</b>	<b>100</b>	<b>1000000</b>	<b>0.339988</b>	<b>3400</b>
<b>Lead Frame</b>							
Copper and Its Alloys	Copper	7440-50-8	57.751061	97.642414	976424	22.793267	227933
Copper and Its Alloys	Iron	7439-89-6	1.264954	2.138717	21387	0.499254	4993
Copper and Its Alloys	Phosphorus	7723-14-0	0.019506	0.03298	330	0.007699	77
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.017733	0.029982	300	0.006999	70
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.017733	0.029982	300	0.006999	70
Zinc and Its Alloys	Zinc	7440-66-6	0.074479	0.125925	1259	0.029395	294
Sub-Total			<b>59.145466</b>	<b>100</b>	<b>1000000</b>	<b>23.343612</b>	<b>233436</b>
<b>Lead Frame Plating</b>							
Nickel and Its Alloys	Nickel	7440-02-0	4.109184	95.12	951200	1.621818	16218
Precious Metals	Gold	7440-57-5	0.033696	0.78	7800	0.013299	133
Precious Metals	Palladium	7440-05-3	0.17712	4.1	41000	0.069906	699
Sub-Total			<b>4.32</b>	<b>100</b>	<b>1000000</b>	<b>1.705023</b>	<b>17050</b>
<b>Mold Compound</b>							
Other Inorganic Materials	Fused Silica	60676-86-0	163.785009	88	880000	64.642888	646429
Other Plastics and Rubber	Carbon Black	1333-86-4	0.558358	0.3	3000	0.220373	2204
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	1.023656	0.55	5500	0.404018	4040
Thermoplastics	Epoxy	85954-11-6	20.752305	11.15	111500	8.190548	81905
Sub-Total			<b>186.119328</b>	<b>100</b>	<b>1000000</b>	<b>73.457828</b>	<b>734578</b>
<b>Semiconductor Device</b>							
Ceramics / Glass	Doped Silicon	7440-21-3	2.819314	100	1000000	1.112731	11127
Sub-Total			<b>2.819314</b>	<b>100</b>	<b>1000000</b>	<b>1.112731</b>	<b>11127</b>
<b>Total</b>			<b>253.368952</b>			<b>100</b>	<b>1000000</b>

**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 (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.

**Important Information/Disclaimer**  
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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](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.