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

Contact Info: <u>ti.com/support</u>

Form/Declaration Type: Distribute - RoHS and IEC 62474 DB

Created on: **08/25/2022** 

#### Details for "SN65LVDS93BDGGR"

#### **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)*
SN65LVDS93BDGGR	NIPDAU	Level-2-260C-1 YEAR	TI MALAYSIA A/T	DGG   56	14x6.1x1.2	263.1

#### \*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**

				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	0.671656	99.997618	999976	0.255306	2553
Copper and Its Alloys	Iron	7439-89-6	0.000003	0.000447	4	0.000001	0
Nickel and Its Alloys	Nickel	7440-02-0	0.000001	0.000149	1	0	0
Other Inorganic Materials	Sulfur	7704-34-9	0.000001	0.000149	1	0	0
Other Nonferrous Metals and Alloys	Manganese	7439-96-5	0.000002	0.000298	3	0.000001	0
Precious Metals	Silver	7440-22-4	0.000009	0.00134	13	0.000003	0
Sub-Total			0.671672	100	1000000	0.255312	2553
Die Attach Adhesive	,			-			
Precious Metals	Silver	7440-22-4	0.541938	70.000013	700000	0.205998	2060
Thermoplastics	Ероху	85954-11-6	0.232259	29.999987	300000	0.088285	883
Sub-Total			0.774197	100	1000000	0.294283	2943
Lead Frame	•	•					
Copper and Its Alloys	Copper	7440-50-8	87.47418	97.41	974100	33.250203	332502
Copper and Its Alloys	Iron	7439-89-6	2.1552	2.4	24000	0.819223	8192
Copper and Its Alloys	Phosphorus	7723-14-0	0.02694	0.03	300	0.01024	102
Other Nonferrous Metals and Alloys	Lead	7439-92-1	0.02694	0.03	300	0.01024	102
Other Nonferrous Metals and Alloys	Tin	7440-31-5	0.02694	0.03	300	0.01024	102
Zinc and Its Alloys	Zinc	7440-66-6	0.0898	0.1	1000	0.034134	341
Sub-Total			89.8	100	1000000	34.13428	341343
Lead Frame Plating	•	•					
Nickel and Its Alloys	Nickel	7440-02-0	1.540944	95.12	951200	0.585735	5857
Precious Metals	Gold	7440-57-5	0.012636	0.78	7800	0.004803	48
Precious Metals	Palladium	7440-05-3	0.06642	4.1	41000	0.025247	252
Sub-Total			1.62	100	1000000	0.615785	6158
Mold Compound	•	•					
Other Inorganic Materials	Fused Silica	60676-86-0	142.654163	85.5	855000	54.224913	542249
Other Nonferrous Metals and Alloys	Metal Hydroxide	Trade Secret	5.005409	3	30000	1.902628	19026
Other Organic Materials	Chlorine	7782-50-5	0.033369	0.02	200	0.012684	127
Other Plastics and Rubber	Carbon Black	1333-86-4	0.500541	0.3	3000	0.190263	1903
Other Plastics and Rubber	Organic Phosphorus	1330-78-5	0.166847	0.1	1000	0.063421	634
Thermoplastics	Ероху	85954-11-6	18.486645	11.08	110800	7.027041	70270
Sub-Total			166.846974	100	1000000	63.420951	634210
Semiconductor Device	•	•					
Ceramics / Glass	Doped Silicon	7440-21-3	3.365795	100	1000000	1.279387	12794
Sub-Total			3.365795	100	1000000	1.279387	12794
Total			263.078638			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 (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.

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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: 08/25/2022

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 (CI) and Bromine (Br)-based flame retardants meet JS709B low halogen requirements of <=1 000ppm threshold; Antimony trioxide (Sb203) contained in halogen based flame retardant materials meets the <=1 000ppm threshold requirement; and Beryllium Oxide (BeO) is <=1000ppm.