### Supplier Name: Texas Instruments Inc. (DUNS# 00-732-1904) Contact Info: ti.com/support Form/Declaration Type: Distribute - RoHS and IEC 62474 DB 06/08/2022 Created on:

# Details for "TLC2254AIPW"

# **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)*
TLC2254AIPW	NIPDAU	Level-1-260C-UNLIM	TI MALAYSIA A/T	PW   14	4.4x5x1.15	67.6

\*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 REA	CH Green	IEC 62474 DB
Yes Ye	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	0.059844	99.998329	999983	0.088577	886	
Precious Metals	Silver	7440-22-4	0.000001	0.001671	17	0.000001	0	
Sub-Total			0.059845	100	1000000	0.088578	886	
Die Attach Adhesive								
Precious Metals	Silver	7440-22-4	0.497886	79.999936	799999	0.736934	7369	
Thermoplastics	Epoxy	85954-11-6	0.124472	20.000064	200001	0.184234	1842	
Sub-Total			0.622358	100	1000000	0.921168	9212	
Lead Frame								
Copper and Its Alloys	Copper	7440-50-8	28.67088	97.52	975200	42.436488	424365	
Copper and Its Alloys	Iron	7439-89-6	0.6762	2.3	23000	1.000861	10009	
Copper and Its Alloys	Phosphorus	7723-14-0	0.00882	0.03	300	0.013055	131	
Zinc and Its Alloys	Zinc	7440-66-6	0.0441	0.15	1500	0.065274	653	
Sub-Total			29.4	100	1000000	43.515677	435157	
Lead Frame Plating								
Nickel and Its Alloys	Nickel	7440-02-0	0.113954	95.1202	951202	0.168666	1687	
Precious Metals	Gold	7440-57-5	0.000934	0.779633	7796	0.001382	14	
Precious Metals	Palladium	7440-05-3	0.004912	4.100167	41002	0.00727	73	
Sub-Total			0.1198	100	1000000	0.177319	1773	
Mold Compound								
Other Inorganic Materials	Silica	7631-86-9	30.026467	85.000001	850000	44.442927	444429	
Other Plastics and Rubber	Carbon Black	1333-86-4	0.176626	0.499999	5000	0.261429	2614	
Thermoplastics	Epoxy	85954-11-6	5.122162	14.5	145000	7.58144	75814	
Sub-Total			35.325255	100	1000000	52.285796	522858	
Semiconductor Device								
Ceramics / Glass	Doped Silicon	7440-21-3	2.0346	100	1000000	3.011462	30115	
Sub-Total			2.0346	100	1000000	3.011462	30115	
Total			67.561858			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.

# 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: 06/08/2022

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 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.