


MATERIAL DECLARATION SHEET



Material Number	BIDNW30N60H3 TO-247N			
Product Line	Semiconductor			
Compliance Date	2022-06-24			
RoHS Compliant	YES, 7(a)	MSL	NA	

No.	Construction Element(subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material Substances	CASRN if applicable	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
1	Chip1	Silicon	0.0169	Silicon dioxide	14808-60-7	0.91%	0.001263%	0.28%
				Silicon nitride	12033-89-5	0.01%	0.000014%	
				TiN	25583-20-4	0.02%	0.000028%	
				Silicon	7440-21-3	79.02%	0.109642%	
				Aluminum	7429-90-5	6.76%	0.009380%	
				Silver	7440-22-4	5.61%	0.007784%	
				Copper	7440-50-8	5.84%	0.008103%	
				Vanadium	7440-62-2	1.18%	0.001637%	
	Titanium			7440-32-6	0.22%	0.000305%		
	Nickel			7440-02-0	0.43%	0.000597%		
	Chip2			Silicon dioxide	14808-60-7	0.28%	0.000389%	
				Platinum	7440-06-4	0.03%	0.000042%	
				Silicon	7440-21-3	98.88%	0.137198%	
				Aluminum	7429-90-5	0.36%	0.000500%	
				Silver	7440-22-4	0.02%	0.000028%	
				Titanium	7440-32-6	0.24%	0.000333%	
Nickel		7440-02-0	0.19%	0.000264%				
Aluminum		7429-90-5	100.00%	0.101149%				
2	Al wire	Aluminum	0.00616	Aluminum	7429-90-5	100.00%	0.101149%	0.10%
3	Soft Solder	PbSn	0.0075	Lead	7439-92-1	90.00%	0.110837%	0.12%
				Tin	7440-31-5	10.00%	0.012315%	
4	Lead frame	Copper	4.0642	Copper	7440-50-8	99.87%	66.648876%	66.74%
				Iron	7439-89-6	0.10%	0.066736%	
				Phosphorus	7723-14-0	0.03%	0.020021%	

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5	Mold Compound	Resin	1.96399	Silica, vitreous	60676-86-0	80.00%	25.799540%	32.25%
				Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	29690-82-2	10.00%	3.224943%	
				Phenol-formaldehyde polymer	9003-35-4	7.00%	2.257460%	
				Zinc borate hydrate	138265-88-0	1.00%	0.322494%	
				Carbon black	1333-86-4	1.00%	0.322494%	
				3-Mercaptopropyl trimethoxysilane	4420-74-0	1.00%	0.322494%	
6	Plating	Matte-100% tin	0.03125	Tin	7440-31-5	100.00%	0.513136%	0.51%
		Total weight	6.090g					

This Document was updated on: 2022/06/24

(EU) RoHS Directive 2011/65/EU ANNEX Application of lead which are exempted from the requirements

7(a) Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)