

100% Material Declaration Data Sheet for XCV1402-VSVA3340

Average Weight : 31.8862 g

Component	Substance Description	CAS # or Description	% of component	Use in product	Component weight / substance weight (in grams)	Component % of total
Silicon die					0.860110	2.697%
	Silicon	7440-21-3	100.00	basis	0.860110	
Bump					0.049422	0.155%
	PI1	N/A	20.77	basis	0.010267	
	Ti (UBM)	7440-32-6	0.08	metal	0.000039	
	Cu (UBM)	7440-50-8	0.46	metal	0.000229	
	Cu (bump)	7440-50-8	61.66	metal	0.030475	
	Plating Ni	7440-02-0	0.00	metal	0.000000	
	Silver	7440-22-4	0.31	metal	0.000151	
	Tin	7440-31-5	16.72	metal	0.008261	
Underfill					0.081000	0.254%
	Bisphenol F type liquid epoxy resin	9003-36-5	20.00	basis	0.016200	
	1,6-Bis(2,3-epoxypropoxy)naphthalene	27610-48-6	5.00	basis	0.004050	
	Amine type hardener	trade secret	7.50	basis	0.006075	
	Silicon dioxide	60676-86-0	61.50	filler	0.049815	
	Carbon black	1333-86-4	1.00	color agent	0.000810	
	Additives	trade secret	5.00	additives	0.004050	
Solder paste					0.054932	0.172%
	Tin	7440-31-5	86.35	metal	0.047434	
	Silver	7440-22-4	2.70	metal	0.001483	
	Copper	7440-50-8	0.45	metal	0.000247	
	Polymer	trade secret	1.40		0.000769	
	Organic amine	trade secret	3.00	flux	0.001648	
	solvent	trade secret	4.90		0.002692	
Diglycolic acid	trade secret	1.20		0.000659		
Solder paste					0.004100	0.013%
	Tin	7440-31-5	85.40	metal	0.003501	
	silver	7440-22-4	2.70	metal	0.001483	
	Copper	7440-50-8	0.40	metal	0.000220	
	Polymer	-	5.50		0.003021	
	Organic amine	-	3.50	flux	0.001923	
	Solvent	-	2.50		0.001373	
Capacitor 1					0.078400	0.246%
	Barium oxide, obtained by calcining witherite	1304-28-5	40.42	Ceramic	0.031689	
	Titanium dioxide	13463-67-7	20.21	-	0.015845	
	NiSe	7440-02-0	6.74	-	0.002282	
	Nickel	7440-02-0	18.95	Internal Electrode	0.014854	
	Copper (Cu)	7440-50-8	5.21	Outer electrode	0.004085	
	Silicon dioxide	7631-86-9	0.46	-	0.000363	
	Diboron trioxide; Boric oxide	1303-86-2	0.12	-	0.000091	
	Nickel	7440-02-0	4.21	Plating	0.003301	
	Tin	7440-31-5	3.68	Plating	0.002888	
Capacitor 2					0.039200	0.123%
	Ceramic	66402-68-4	22.75	Dielectric	0.008918	
	Nickel	7440-02-0	30.75	Inner Electrode	0.012054	
	Copper	7440-50-8	41.13	Terminal Electrode	0.016121	
	Nickel	7440-02-0	2.00	Electroplating	0.000784	
	Tin	7440-31-5	3.38	Electroplating	0.001323	
Capacitor 3					0.076000	0.238%
	BaTiO3	12047-27-7	34.00	Ceramic	0.025840	
	Nickel	7440-02-0	18.10	Internal Electrode	0.013756	
	Copper	7440-50-8	41.10	Termination	0.031236	
	Nickel	7440-02-0	3.40	Plating	0.002584	
Tin	7440-31-5	3.40	Plating	0.002584		
Heat sink					11.030000	34.592%
	Carbon	7440-44-0	0.08	Main material	0.008824	
	Silicon	7440-21-3	1.00	Main material	0.110300	
	Manganese	7439-96-5	2.00	Main material	0.220600	
	Phosphorus	7723-14-0	0.05	Main material	0.004964	
	Sulfur	7704-34-9	0.03	Main material	0.003309	
	Chromium	7440-47-3	20.00	Main material	2.206000	
	Nickel	7440-02-0	10.50	Main material	1.158150	
	Iron	7439-89-6	66.35	Main material	7.317854	
					0.046000	0.144%
Heat sink adhesive	Treated Aluminium Oxide	None	80.00	Main material	0.036800	
	Dimethyl siloxane, dimethylvinyl-terminated	68083-19-2	20.00	Main material	0.009200	
Solder ball					3.244237	10.174%
	Tin	7440-31-5	96.50	Main material	3.130689	
	Silver	7440-22-4	3.00	Main material	0.097327	
Copper	7440-50-8	0.50	Main material	0.016221		
Substrate					16.322826	51.191%
	Copper	7440-50-8	38.48	Plating	6.280424	
	Tin	7440-31-5	0.20	Plating	0.032166	
	Silver	7440-22-4	0.01	Plating	0.000847	
	Core	N/A	44.85	Plating	7.320500	
	Plugging	N/A	0.65	Plugging	0.105951	
	ABF	N/A	14.83	Build Up	2.420000	
	Solder Mask	N/A	1.00	Solder Mask	0.162939	

Revision History

Date	Version	Description of Revisions
8/24/2023	1.0	Initial AMD Release.
5/28/2024	1.1	Fixed solder ball substance description.

Notice of Disclaimer

AMD regards this materials data to be correct but makes no guarantee as to its accuracy or completeness, including, but not limited to, with respect to its compliance with applicable environmental laws and regulations. AMD subcontracts the production, test and assembly of hardware devices to independent third-party vendors and materials suppliers ("Contractors"). All data provided hereunder is based on information received from Contractors. AMD has not independently verified the accuracy or completeness of this information which is provided solely for your reference in connection with the use of AMD products.