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AMD

PK1236(v1.0) January 13, 2025

100% Material Declaration Data Sheet for Virtex 4 SF363

Average Weight : 1.6444 g

Component	Substance Description	CAS # or Description	% of component	Use in product	Component weight / substance weight (in grams)	Component % of total
Silicon die					**0.045638**	**2.775%**
	Silicon	7440-21-3	100.00	basis	0.045638	
Bump					**0.004204**	**0.256%**
	Tin	7440-31-5	98.20	basis	0.004128	
	Silver	7440-22-4	1.80	basis	0.000076	
Underfill					**0.011800**	**0.718%**
	Bisphenol F type liquid epoxy resin	9003-36-5	15.00	basis	0.001770	
	1,6-Bis(2,3-epoxypropoxy)naphthalene	27610-48-6	10.00	basis	0.001180	
	Bisphenol A type liquid epoxy resin	25068-38-6	5.00	basis	0.000590	
	Amine type hardener	trade secret	10.00	basis	0.001180	
	Silicon dioxide	60676-86-0	58.00	filler	0.006844	
	Carbon black	1333-86-4	1.00	color agent	0.000118	
	Additives	trade secret	1.00	additives	0.000118	
Heat sink					**0.780000**	**47.433%**
	Copper	7440-50-8	98.35	Main material	0.767130	
	Nickel	7440-02-0	1.65	Main material	0.012870	
Heat sink adhesive					**0.025000**	**1.520%**
	Aluminium Oxide Al2O3	1344-28-1	70.00	Main material	0.017500	
	Dimethyl siloxane, dimethylvinyl-terminated	68083-19-2	30.00	Main material	0.007500	
Solder ball					**0.343446**	**20.885%**
	Tin	7440-31-5	63.00	Main material	0.216371	
	Lead	7439-92-1	37.00	Main material	0.127075	
Substrate					**0.434339**	**26.413%**
	Copper	7440-50-8	24.08	Main material	0.104586	
	Tin	7440-31-5	0.86	basis	0.003722	
	Silver	7440-22-4	0.03	basis	0.000116	
	Core	trade secret	61.50	Main material	0.267114	
	ABF	trade secret	8.33	Main material	0.036184	
	Solder Mask	trade secret	3.11	Main material	0.013488	
	Resine Plugging	trade secret	2.10	basis	0.009130	

Revision History

Date	Version	Description of Revisions
1/13/2025	1.0	Initial AMD Release.

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