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AMD

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100% Material Declaration Data Sheet for Zynq UltraScale+ SFVD784

Average Weight : 5.9454 g

Component	Substance Description	CAS # or Description	% of component	Use in product	Component weight / substance weight (in grams)	Component % of total
Silicon die 1					**0.171147**	**2.879%**
	Silicon	7440-21-3	100.00	basis	0.171147	
Bump					**0.007545**	**0.127%**
	Tin	7440-31-5	98.20	basis	0.007409	
	Silver	7440-22-4	1.80	basis	0.000136	
Underfill					**0.033000**	**0.555%**
	Bisphenol F type liquid epoxy resin	9003-36-5	15.00	basis	0.004950	
	1,6-Bis(2,3-epoxypropoxy)naphthalene	27610-48-6	10.00	basis	0.003300	
	Bisphenol A type liquid epoxy resin	25068-38-6	5.00	basis	0.001650	
	Amine type hardener	trade secret	10.00	basis	0.003300	
	Silicon dioxide	60676-86-0	58.00	filler	0.019140	
	Carbon black	1333-86-4	1.00	color agent	0.000330	
	Additives	trade secret	1.00	additives	0.000330	
Solder paste					**0.006392**	**0.108%**
	Tin	7440-31-5	85.86	metal	0.005488	
	Silver	7440-22-4	2.70	metal	0.000173	
	Copper	7440-50-8	0.44	metal	0.000028	
	Polyoxyethylene glycol	25322-68-3	1.50	flux	0.000096	
	Oxirane, 2-methyl-, polymer with oxirane, bis(2-aminopropyl) ether	65605-36-9	3.10		0.000198	
	Diethylene glycol mono-2-ethylhexylether	1559-36-0	5.10		0.000326	
	Diglycolic acid	110-99-6	1.30		0.000083	
Capacitor 1					**0.017600**	**0.296%**
	Barium oxide, obtained by calcining witherite	1304-28-5	40.42	Ceramic	0.007114	
	Titanium dioxide	13463-67-7	20.21		0.003557	
	Misc	-	6.74		0.001186	
	Nickel	7440-02-0	18.95	Internal Electrode	0.003335	
	Copper	7440-50-8	5.21	Outer electrode	0.000917	
	Silicon dioxide	7631-86-9	0.46		0.000081	
	Diboron trioxide; Boric oxide	1303-86-2	0.12		0.000020	
	Nickel	7440-02-0	4.21	Plating	0.000741	
	Tin	7440-31-5	3.68	Plating	0.000648	
Capacitor 2					**0.009900**	**0.167%**
	BaTiO3	12047-27-7	34.00	Ceramic	0.003366	
	Nickel	7440-02-0	18.10	Internal Electrode	0.001792	
	Copper	7440-50-8	41.10	Termination	0.004069	
	Nickel	7440-02-0	3.40	Plating	0.000337	
	Tin	7440-31-5	3.40	Plating	0.000337	
Heat sink					**3.351000**	**56.363%**
	Copper	7440-50-8	98.35	Main material	3.295709	
	Nickel	7440-02-0	1.65	Main material	0.055292	
Heat sink adhesive					**0.027000**	**0.454%**
	Treated aluminum oxide	None	80.00	Main material	0.021600	
	Dimethyl siloxane, dimethylvinyl-terminated	68083-19-2	20.00	Main material	0.005400	
Solder ball					**0.379008**	**6.375%**
	Sn	7440-31-5	96.50	Main material	0.365743	
	Ag	7440-22-4	3.00	Main material	0.011370	
	Cu	7440-50-8	0.50	Main material	0.001895	
Substrate					**1.942805**	**32.677%**
	Copper	7440-50-8	35.12		0.682152	
	Tin	7440-31-5	0.40		0.007827	
	Silver	7440-22-4	0.01		0.000243	
	Core	Trade Secret	46.81		0.909450	
	ABF	Trade Secret	15.21		0.295579	
	Solder Mask	Trade Secret	1.21		0.023553	
	Resine Plugging	Trade Secret	1.24		0.024000	

Revision History

Date	Version	Description of Revisions
10/7/2025	1.0	Initial AMD Release.

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