



Material Declaration Sheet

- Device : ASFC64G31T5-51BIN
 - Package : 11.5 x 13.0 153ball FBGA eMMC
 - Weight (mg) : 302.8952mg

Material	Component wt (mg)	Purpose	Substances	CAS No.	Weight (mg)	wt % of Total unit wt	Element wt (%)	PPM	
Printed Circuit Board	89.8772	Au	Au Plating	7440-57-5	0.1806	0.06%	0.20%	596	
			Ni	Ni Plating	7440-02-0	1.4043	0.46%	1.57%	4636
			Cu	Cu Plating	7440-50-8	60.2458	19.87%	67.18%	198900
		Core		Copper foil	7440-50-8	9.6540	3.19%	10.77%	31872
				E-glass fabric	65997-17-3	9.4540	3.19%	10.77%	31872
				Poly(acrylic acid)	Trade Secret	3.4871	1.15%	3.89%	11512
		Solder Mask		Barium sulfate	7727-43-7	2.0954	0.69%	2.34%	6918
				3-Methoxy-3-methylbutyl Acetate	103429-90-9	1.0239	0.34%	1.14%	3380
				Dipropylene Glycol Monomethyl Ether	34590-94-8	0.8661	0.29%	0.97%	2859
				Talc	14807-96-6	0.2128	0.07%	0.24%	703
				Photopolymerization	Trade Secret	0.2128	0.07%	0.24%	703
				Solvent naphtha	64742-94-5	0.2128	0.07%	0.24%	703
				Auxiliaries	Trade Secret	0.2128	0.07%	0.24%	703
				Silicon dioxide	Trade Secret	0.0412	0.01%	0.05%	136
				Phthalocyanine blue	Trade Secret	0.0412	0.01%	0.05%	136
Organic pigment	Trade Secret	0.1324	0.04%	0.15%	437				
Chip Capacitor	3.2000	Ceramic element	Barium oxide, obtained by calcining whiterite	1304-28-5	1.2780	0.42%	39.94%	4219	
			Titanium dioxide	13463-67-7	0.6390	0.21%	19.97%	2110	
			Misc	-	0.2130	0.07%	6.66%	703	
		Outer electrode		Copper	7440-50-8	0.3438	0.11%	10.74%	1135
				diboron trioxide; boric oxide	1303-86-2	0.0076	0.00%	0.24%	25
		Nickel Plating Layer		Silicon dioxide	7631-86-9	0.0306	0.01%	0.96%	101
				Nickel	7440-02-0	0.0360	0.01%	1.13%	119
		Inner electrode		Nickel	7440-02-0	0.5580	0.18%	17.44%	1842
		Tin Plating Layer		Tin	7440-31-5	0.0940	0.03%	2.94%	310
		FLASH Die	11.8700	Silicon Die	Silicon	7440-21-3	11.8700	3.92%	100.00%
Misc	-				0.0000	0.00%	0.00%	0	
FLASH Die Attach - DAF Tape	0.1000	Adhesive Resin	Acryl copolymer	Trade Secret	0.0429	0.01%	42.86%	141	
			Epoxy	29690-82-2	0.0143	0.00%	14.29%	47	
			Hardener	Trade Secret	0.0143	0.00%	14.29%	47	
			Silica	7631-86-9	0.0286	0.01%	28.57%	94	
Controller Die	2.6406	Silicon Die	Silicon	7440-21-3	2.6406	0.87%	100.00%	8718	
			Misc	-	0.0000	0.00%	0.00%	0	
Controller Die Attach - Adhesive	0.1000	Adhesive	EP	-	0.0490	0.02%	48.96%	162	
			Silamin, 1,1,1-Trimethyl-N-(trimethylsilyl)-, Hydrolyseprodukte mit Siliciumdioxid	68909-20-6	0.0340	0.01%	34.00%	112	
			Siliciumdioxid	7631-86-9	0.0170	0.01%	17.00%	56	
			Diisentrioxid	1309-37-1	0.0000	0.00%	0.03%	0	
			Calciumbis[4-[[[3-[[2-hydroxy-3-[[[4-methoxyphenyl]amino]carbonyl]-1-naphthyl]azo]-4-methylbenzoyl]amino]benzoyl]sulfonat]	43035-18-3	0.0000	0.00%	0.01%	0	
			N-(2,3-Dihydro-2-oxo-1H-benzimidazol-5-yl)-3-hydroxy-4-[[2-methoxy-5-methyl-4-[(methylamino)sulfonyl]phenyl]azo]na phthalin-2-carboxamid	51920-12-8	0.0000	0.00%	0.01%	0	
Bonding Wire	0.7113	Bonding wire	Gold	7440-57-5	0.7112	0.23%	99.99%	2348	
			Misc	-	0.0001	0.00%	0.01%	0	
Molding Compound	178.0000	Molding Compound	Silica (Fused)	60676-86-0 7631-86-9	154.3260	50.95%	86.70%	509503	
			Epoxy resin (1)	-	8.9000	2.94%	5.00%	29383	
			Epoxy resin (2)	-	4.4500	1.47%	2.50%	14692	
			Phenol resin (1)	-	5.3400	1.76%	3.00%	17630	
			Phenol resin (2)	-	4.4500	1.47%	2.50%	14692	
			Carbon black	1333-86-4	0.5340	0.18%	0.30%	1763	
Solderpaste	0.6900	Solderpaste	Tin	7440-31-5	0.4790	0.16%	80.00%	1558	
			Silver	7440-22-4	0.0236	0.01%	4.00%	78	
			Rosin, oligomers	65997-05-9	0.0354	0.01%	6.00%	117	
			2-(2-Hexyloxyethoxy)ethanol	112-59-4	0.0354	0.01%	6.00%	117	
			Indium	7440-74-6	0.0212	0.01%	3.60%	70	
			Bismut	7440-69-9	0.0024	0.00%	0.40%	8	
Solder Balls	16.0061	Solder Balls	Tin	7440-31-5	15.4299	5.09%	96.40%	50941	
			Silver	7440-22-4	0.4802	0.16%	3.00%	1585	
			Copper	7440-50-8	0.0960	0.03%	0.60%	317	
Total					302.8952	100.0%		1000000	