



Material Declaration Sheet

-. Device : ASFC32G31T3-51BIN
 -. Package : 11.5 x 13.0 153ball FBGA eMMC
 -. Weight (mg) : 306.6211mg

Material	Component wt (mg)	Purpose	Substances	CAS No.	Weight (mg)	wt % of Total unit wt	Element wt (%)	PPM	
Printed Circuit Board	89.6772	Au	Au Plating	7440-57-5	0.1806	0.06%	0.20%	589	
			Ni	Ni Plating	7440-02-0	1.4043	0.46%	1.57%	4580
			Cu	Cu Plating	7440-50-8	60.2458	19.65%	67.18%	196483
		Core	Solder Mask	Copper foil	7440-50-8	9.6540	3.15%	10.77%	31485
				E-glass Fabric	65997-17-3	9.6540	3.15%	10.77%	31485
				Poly(acrylic acid)	Trade Secret	3.4871	1.14%	3.89%	11373
				Barium sulfate	7727-43-7	2.0954	0.68%	2.34%	6834
				3-Methoxy-3-methylbutyl Acetate	103429-90-9	1.0239	0.33%	1.14%	3339
				Dipropylene Glycol Monomethyl Ether	34590-94-8	0.8661	0.28%	0.97%	2825
				Talc	14807-96-6	0.2128	0.07%	0.24%	694
				Photopolymerization	Trade Secret	0.2128	0.07%	0.24%	694
				Solvent naphtha	64742-94-5	0.2128	0.07%	0.24%	694
				Auxiliaries	Trade Secret	0.2128	0.07%	0.24%	694
				Silicon dioxide	Trade Secret	0.0412	0.01%	0.05%	134
				Phthalocyanine blue	Trade Secret	0.0412	0.01%	0.05%	134
				Organic pigment	Trade Secret	0.1324	0.04%	0.15%	432
				Chip Capacitor	3.2000	Ceramic element	Barium oxide, obtained by calcining whiterite	1304-28-5	1.2780
Titanium dioxide	13463-67-7	0.6390	0.21%				19.97%	2084	
Misc	-	0.2130	0.07%				6.66%	695	
Outer electrode	Copper	7440-50-8	0.3438			0.11%	10.74%	1121	
	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%	100	
	Nickel	7440-02-0	0.0360			0.01%	1.13%	117	
Inner electrode	Nickel	7440-02-0	0.5580			0.18%	17.44%	1820	
	Tin Plating Layer	Tin	7440-31-5	0.0940	0.03%	2.94%	307		
FLASH Die	17.6000	Silicon Die	Silicon	7440-21-3	17.5000	5.71%	100.00%	57074	
			Misc	-	0.0000	0.00%	0.00%	0	
FLASH Die Attach - DAF Tape	0.2000	Adhesive Resin	Acryl copolymer	Trade Secret	0.0857	0.03%	42.86%	280	
			Epoxy	29690-82-2	0.0286	0.01%	14.29%	93	
			Hardener	Trade Secret	0.0286	0.01%	14.29%	93	
			Silica	7631-86-9	0.0571	0.02%	28.57%	186	
Controller Die	2.6406	Silicon Die	Silicon	7440-21-3	2.6406	0.86%	100.00%	8612	
			Misc	-	0.0000	0.00%	0.00%	0	
Controller Die Attach - Adhesive	0.1000	Adhesive	EP	-	0.0490	0.02%	48.96%	160	
			Silnanamin, 1,1,1-Trimethyl-N-(trimethylsilyl)-, Hydrolyseprodukte mit Siliciumdioxid	68909-20-6	0.0340	0.01%	34.00%	111	
			Siliziumdioxid	7631-86-9	0.0170	0.01%	17.00%	55	
			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]naphthalin-2-carboxamid	51920-12-8	0.0000	0.00%	0.01%	0	
Bonding Wire	0.7072	Bonding wire	Gold	7440-57-5	0.7071	0.23%	99.99%	2306	
			Misc	-	0.0001	0.00%	0.01%	0	
Molding Compound	176.0000	Molding Compound	Silica (Fused)	60676-86-0 7631-86-9	152.5920	49.77%	86.70%	497657	
			Epoxy resin (1)	8.8000	2.87%	5.00%	28700		
			Epoxy resin (2)	-	4.4000	1.43%	2.50%	14350	
			Phenol resin (1)	-	5.2800	1.72%	3.00%	17220	
			Phenol resin (2)	-	4.4000	1.43%	2.50%	14350	
			Carbon black	1333-86-4	0.5280	0.17%	0.30%	1722	
			Solderpaste	0.5900	Solderpaste	Tin	7440-31-5	0.4720	0.15%
Silver	7440-22-4	0.0236				0.01%	4.00%	77	
Rosin, oligomers	65997-05-9	0.0354				0.01%	6.00%	115	
2-(2-Hexyloxyethoxy)ethanol	112-59-4	0.0354				0.01%	6.00%	115	
Indium	7440-74-6	0.0212				0.01%	3.60%	69	
Bismut	7440-69-9	0.0024				0.00%	0.40%	8	
Solder Balls	16.0061	Solder Balls	Tin	7440-31-5	15.4299	5.03%	96.40%	50322	
			Silver	7440-22-4	0.4802	0.16%	3.00%	1566	
			Copper	7440-50-8	0.0960	0.03%	0.60%	313	
				Total	306.6211	100.0%		1000000	