Material Declaration Sheet

-. Device : ASFC10G31P3-51BIN
-. 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	0.0589%	0.2013%	589
		Ni	Ni Plating	7440-02-0	1.4043	0.4580%	1.5659%	4580
		Cu	Cu Plating	7440-50-8	60.2458	19.6483%	67.1807%	196483
		Core	Copper foil	7440-50-8	9.6540	3.1485%	10.7652%	31485
			E-Glass Fabric	65997-17-3	9.6540	3.1485%	10.7652%	31485
		Solder Mask	Poly(acrylicacid)	Trade Secret	3.4871	1.1373%	3.8885%	11373
			Barium sulfate	7727-43-7	2.0954	0.6834%	2.3366%	6834
			3-Methoxy-3-methylbutyl Acetate	103429-90-9	1.0239	0.3339%	1.1418%	3339
			Dipropylene Glycol Monomethyl Ether	34590-94-8	0.8661	0.2825%	0.9658%	2825
			Talc	14807-96-6	0.2128	0.0694%	0.2373%	694
			Photoplymerization	Trade Secret	0.2128	0.0694%	0.2373%	694
			Solvent naphtha	64742-94-5	0.2128	0.0694%	0.2373%	694
			Auxiliaries	Trade Secret	0.2128	0.0694%	0.2373%	694
			Silicon dioxide	Trade Secret	0.0412	0.0134%	0.0460%	134
			Phthalocyanine blue	Trade Secret	0.0412	0.0134%	0.0460%	134
			Organic pigment	Trade Secret	0.1324	0.0432%	0.1477%	432
Chip Capacitor	3.2000	Ceramics	Barium oxide, obtained by calcining witherite	1304-28-5	1.2780	0.4168%	39.9375%	4168
			Titanium dioxide	13463-67-7	0.6390	0.2084%	19.9688%	2084
			Misc	Trade Secret	0.2130	0.0695%	6.6563%	695
		Outer electrode	Copper	7440-50-8	0.3438	0.1121%	10.7438%	1121
			Borosilicate Glass	-	0.0076	0.0025%	0.2388%	25
			Silicon dioxide	7631-86-9	0.0306	0.0100%	0.9550%	100
		Nickel plating	Nickel	7440-02-0	0.0360	0.0117%	1.1250%	117
		Inner electrode	Nickel	7440-02-0	0.5580	0.1820%	17.4375%	1820
		Tin plating	Tin	7440-31-5	0.0940	0.0307%	2.9375%	307
FLASH Die	17.5000	Silicon Die	Silicon	7440-21-3	17.5000	5.7074%	99.9999%	57074
			Misc	-	0.0000	0.0000%	0.0001%	0
FLASH Die Attach - DAF Tape	0.2000	Adhesive Resin	Acryl copolymer	Trade Secret	0.0857	0.0280%	42.8571%	280
			Epoxy	29690-82-2	0.0286	0.0093%	14.2857%	93
			Hardener	Trade Secret	0.0286	0.0093%	14.2857%	93
			Silica	7631-86-9	0.0571	0.0186%	28.5714%	186
Controller Die	2.6406	Silicon Die	Silicon	7440-21-3	2.6406	0.8612%	99.9999%	8612
			Misc	-	0.0000	0.0000%	0.0000%	0
Controller Die Attach - Adhesive	0.1000	Adhesive	EP	-	0.0490	0.0160%	48.9600%	160
			Silanamin, 1,1,1-Trimethyl-N-(trimethylsilyl)-, Hydrolyseprodukte mit Siliciumdioxid	68909-20-6	0.0340	0.0111%	34.0000%	111
			Siliziumdioxid	7631-86-9	0.0170	0.0055%	17.0000%	55
			Dieisentrioxid	1309-37-1	0.0000	0.0000%	0.0300%	0
			Calciumbis[4-[[3-[[2-hydroxy-3-[[(4-methoxyphenyl)amino]carbonyl]-1-naphthyl]azo]-4-methylbenzoyl]amino]benzolsulfonat]	43035-18-3	0.0000	0.0000%	0.0050%	0
			N-(2,3-Dihydro-2-oxo-1Hbenzimidazol-5-yl)-3-hydroxy-4-[[2-methoxy-5-methyl-4-[(methylamino)sulfonyl]phenyl]azo]na phthalin-2-carboxamid	51920-12-8	0.0000	0.0000%	0.0050%	0
Bonding Wire	0.7072	Bonding wire	Gold	7440-57-5	0.7071	0.2306%	99.9900%	2306
			Misc	-	0.0001	0.0000%	0.0100%	0
Molding Compound	176.0000	Molding Compound	Silica (Fused)	60676-86-0 7631-86-9	152.5920	49.7657%	86.7000%	497657
			Epoxy resin (1)	-	8.8000	2.8700%	5.0000%	28700
			Epoxy resin (2)	-	4.4000	1.4350%	2.5000%	14350
			Phenol resin (1)	-	5.2800	1.7220%	3.0000%	17220
			Phenol resin (2)	-	4.4000	1.4350%	2.5000%	14350
			Carbon black	1333-86-4	0.5280	0.1722%	0.3000%	1722
Solderpaste	0.5900	Solderpaste	Tin	7440-31-5	0.4720	0.1539%	80.0000%	1539
			Silver	7440-22-4	0.0236	0.0077%	4.0000%	77
			Rosin, oligomers	65997-05-9	0.0354	0.0115%	6.0000%	115
			2-(2-Hexyloxyethoxy)ethanol	112-59-4	0.0354	0.0115%	6.0000%	115
			Indium	7440-74-6	0.0212	0.0069%	3.6000%	69
			Bismut	7440-69-9	0.0024	0.0008%	0.4000%	8
Solder Balls	16.0061	Solder Balls	Tin	7440-31-5	15.4299	5.0322%	96.4000%	50322
			Silver	7440-22-4	0.4802	0.1566%	3.0000%	1566
			Copper	7440-50-8	0.0960	0.0313%	0.6000%	313
				Total	306.6211	100.0000%		1000000

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Fax: 425-896-8628 Alliance Memory Inc. reserves the right to change products or specification without notice