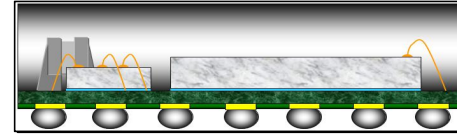




-. Device : ASFC4G31MA-51BIN
-. Package : 11.5 x 13.0 F153 eMMC
-. Weight (mg) : 195.24749999mg

Material Declaration Sheet



Material	Weight (mg)	Substances	CAS No.	Weight (mg)	wt % of Total unit wt	Element wt (%)	PPM
Silicon Die 1	18.690	Silicon Die-NAND	7440-21-3	18.69000000	9.572466%	100.00%	95725
Silicon Die 2	4.670	Silicon Die-Controller	7440-21-3	4.67000000	2.391836%	100.00%	23918
Mold compound	144.285153	Silica glass	60676-86-0	125.52808311	64.291775%	87.00%	642918
		PHENOL, POLYMER WITH 1,4-BIS(METHOXYMETHYL)BENZENE	26834-02-6	7.21425765	3.694930%	5.00%	36949
		4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl	85954-11-6	7.21425765	3.694930%	5.00%	36949
		Carbon Black	1333-86-4	4.32855459	2.216958%	3.00%	22170
Substrate	15.7773815					100.00%	
		Gold	7440-57-5	0.08536650	0.043722%	0.54%	437
		Copper	7440-50-8	10.88873575	5.576889%	69.01%	55769
		Glass cloth	65997-17-3	1.55427625	0.796054%	9.85%	7961
		Resistant Epoxy Resin	223769-10-6	0.32680650	0.167381%	2.07%	1674
		Heat Resistant Resin	25722-66-1	0.32680650	0.167381%	2.07%	1674
		Silica Filler	7631-86-9	0.32680650	0.167381%	2.07%	1674
		Boehmite	1318-23-6	0.61243825	0.313673%	3.88%	3137
		Poly(acrylicacid)	9003-01-4	0.41165300	0.210837%	2.61%	2108
		Barium sulfate	7727-43-7	0.24657775	0.126290%	1.56%	1263
		3-Methoxy-3-methylbutyl Acetate	103429-90-9	0.11929100	0.061097%	0.76%	611
		Dipropylene Glycol Monomethyl Ether	34590-94-8	0.10105950	0.051760%	0.64%	518
		Talc	14807-96-6	0.02440200	0.012498%	0.15%	125
		Photopolymerization	Trade secret	0.02440200	0.012498%	0.15%	125
		Solvent naphtha	64742-94-5	0.02440200	0.012498%	0.15%	125
		Nickel	7440-02-0	0.65541825	0.335686%	4.15%	3357
		Auxiliaries	Proprietary	0.02440200	0.012498%	0.15%	125
		Silicon dioxide	7631-86-9	0.00469325	0.002404%	0.03%	24
		Phthalocyanine blue	147-14-8	0.00469325	0.002404%	0.03%	24
		Organic pigment	Proprietary	0.01515125	0.007760%	0.10%	78
						100.00%	
Solder Paste	0.00027	tin	7440-31-5	0.00025800	0.000132%	95.56%	1
		Copper	7440-50-8	0.00000300	0.000002%	1.11%	0
		silver	7440-22-4	0.00000900	0.000005%	3.33%	0
Ceramic capacitor	3.2					100.00%	
		Barium Titanate(IV)	12047-27-7	2.60000000	1.331643%	81.25%	13316
		Copper	7440-50-8	0.08000000	0.040974%	2.50%	410
		Tin	7440-31-5	0.08000000	0.040974%	2.50%	410
		Nickel	7440-02-0	0.44000000	0.225355%	13.75%	2254
Die Attach	0.0382					100.00%	
		Polyethylene	9002-88-4	0.01757200	0.009000%	46.00%	90
		Silicon dioxide	7631-86-9	0.00955000	0.004891%	25.00%	49
		Poly(oxy-1,2-ethanedioxy carbonyl, 4-phenylenecarbonyl)	25038-59-9	0.00573000	0.002935%	15.00%	29
		n-Butyl Acrylate	141-32-2	0.00267400	0.001370%	7.00%	14
		Ethylhexyl acrylate	1322-13-0	0.00114600	0.000587%	3.00%	6
		4,4'-(1-methylethylidene)bisphenol polymer with (chloromethyl)oxirane	25068-38-6	0.00114600	0.000587%	3.00%	6
		Formaldehyde polymer with (chloromethyl)oxirane and 2-methylphenol	29690-82-2	0.00038200	0.000196%	1.00%	2
Gold wire	0.0000175					100.00%	
		Gold	7440-57-5	0.00001750	0.000009%	100.00%	0
Solder ball	8.58647799					100.00%	
		Tin	7440-31-5	8.43621462	4.320780%	98.25%	43208
		Silver	7440-22-4	0.10303774	0.052773%	1.20%	528
		Copper	7440-50-8	0.04293239	0.021989%	0.50%	220
		Nickel	7440-02-0	0.00429324	0.002199%	0.05%	22
						100.00%	
Total				195.24749999	100.0%		1000000.0

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