



ALLIANCE MEMORY MDS REPORT

Part Number:		ASFC8G31MA-51BIN					
Part Weight:		207.23754699 mg					
Item	Part Name	Component wt (mg)	Material Content (Element)	CAS Number	Element wt (%)	Element wt (mg)	wt % of Total unit wt
1	Silicon Die 1	30.68000000	Silicon Die-NAND	7440-21-3	100.00000000%	30.68000000	14.80426711%
2	Silicon Die 2	4.67000000	Silicon Die-Controller	7440-21-3	100.00000000%	4.67000000	2.25345265%
3	Die Attach	0.03820000	Polyethylene	9002-88-4	46.00000000%	0.017572	0.00847916%
			Silicon dioxide	7631-86-9	25.00000000%	0.00955	0.00460824%
			Poly(oxy-1,2-ethanediylloxycarbonyl-1,4-n-Butyl Acrylate	25038-59-9	15.00000000%	0.00573	0.00276494%
			Ethylhexyl acrylate	141-32-2	7.00000000%	0.002674	0.00129031%
			4,4'-(1-methylethylidene)bisphenol polymer with (chloromethyl)oxirane	1322-13-0	3.00000000%	0.001146	0.00055299%
			Formaldehyde polymer with (chloromethyl)oxirane and 2-methylphenol	25068-38-6	3.00000000%	0.001146	0.00055299%
				29690-82-2	1.00000000%	0.000382	0.00018433%
4	Substrate	15.77738150	Gold	7440-57-5	0.54106887%	0.0853665	0.04119258%
			Copper	7440-50-8	69.01484730%	10.88873575	5.25422922%
			Glass cloth	65997-17-3	9.85129408%	1.55427625	0.74999742%
			Resistant Epoxy Resin	223769-10-6	2.07136083%	0.3268065	0.15769657%
			Heat Resistant Resin	25722-66-1	2.07136083%	0.3268065	0.15769657%
			Silica Filler	7631-86-9	2.07136083%	0.3268065	0.15769657%
			Boehmite	1318-23-6	3.88174838%	0.61243825	0.29552475%
			Poly(acrylicacid)	9003/1/4	2.60913384%	0.411653	0.19863823%
			Barium sulfate	7727-43-7	1.56285598%	0.24657775	0.11898314%
			3-Methoxy-3-methylbutyl	103429-90-9	0.75608871%	0.119291	0.05756245%
			Dipropylene Glycol Monomethyl Ether	34590-94-8	0.64053405%	0.1010595	0.04876505%
			Talc	14807-96-6	0.15466445%	0.024402	0.01177489%
			Photopolymerization	Trade secret	0.15466445%	0.024402	0.01177489%
			Solvent naphtha	64742-94-5	0.15466445%	0.024402	0.01177489%
			Nickel	7440-02-0	4.15416367%	0.65541825	0.31626424%
			Auxiliaries	Proprietary	0.15466445%	0.024402	0.01177489%
			Silicon dioxide	7631-86-9	0.02974670%	0.00469325	0.00226467%
			Phthalocyanine blue	147-14-8	0.02974670%	0.00469325	0.00226467%
			Organic pigment	Proprietary	0.09603146%	0.01515125	0.00731105%
5	Gold wire	0.00001750	Gold	7440-57-5	100.00000000%	0.0000175	0.00000844%
6	Mold compound	144.28520000	Silica glass	60676-86-0	86.99998275%	125.5280991	60.57208307%
			PHENOL, POLYMER WITH 1,4-BIS(METHOXYMETHYL)BENZENE	26834-02-6	5.00000565%	7.21426815	3.48115882%



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6	Mold compound	144.28520000	4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethylbiphenyl	85954-11-6	5.00000565%	7.21426815	3.48115882%
			Carbon Black	1333-86-4	3.00000595%	4.32856459	2.08869708%
7	Solder ball	8.58647799	Tin (Sn)	7440-31-5	98.24999994%	8.43621462	4.07079448%
			Silver (Ag)	7440-22-4	1.20000005%	0.10303774	0.04971963%
			Copper (Cu)	7440-50-8	0.50000000%	0.04293239	0.02071651%
			Nickel	7440-02-0	0.05000001%	0.00429324	0.00207165%
8	Ceramic capacitor	3.20000000	Barium Titanate(IV)	12047-27-7	81.25000000%	2.6	1.25459891%
			Copper	7440-50-8	2.50000000%	0.08	0.03860304%
			Tin	7440-31-5	2.50000000%	0.08	0.03860304%
			Nickel	7440-02-0	13.75000000%	0.44	0.21231674%
9	Solder Paste	0.00027000	Tin	7440-31-5	95.55555556%	0.000258	0.00012449%
			Silver	7440-22-4	3.33333333%	0.000009	0.00000434%
			Copper	7440-50-8	1.11111111%	0.000003	0.00000145%
Total		207.23754699					100%