



ALLIANCE MEMORY MDS REPORT

Part Number:			ASFC16G31TA-51BCN						
Part Weight(mg):			252.864						
No.	Name of Material	Name of Homogeneous Material	Model Name of Homogeneous Material	Vendor of Raw Material	Material name (or Chemical name)	CAS No.	Contain Quantity(mg)	Element wt (%)	wt% of Total unit wt
1	Au Wire	Au Wire	4N	LT	Gold	7440-57-5	0.5859	99.990%	0.232%
					Others	-	0.0001	0.010%	0.000%
2	Film	Film	EM-760L2-P	Nitto	Acrylic Resin	-	1.8934	49.000%	0.749%
					Silica, amorphous	7631-86-9	1.7388	45.000%	0.688%
					Phenol Resin	-	0.2318	6.000%	0.092%
3	Film	Film	EM-310WJ1-P	Nitto	Epoxy resin	-	0.0570	25.000%	0.023%
					Phenol resin	-	0.0570	25.000%	0.023%
					Silica, amorphous	7631-86-9	0.0912	40.000%	0.036%
					Synthetic rubber	-	0.0228	10.000%	0.009%
4	Substrate	Plating Copper	Plating Copper	KINSUS	Plating Cu	7440-50-8	18.1148	27.622%	7.164%
		Plating Gold	Plating Gold	KINSUS	Plating Au	7440-57-5	0.2171	0.331%	0.086%
		Plating Nickel	Plating Nickel	KINSUS	Plating Ni	7440-02-0	1.4723	2.245%	0.582%
		copper foil	copper foil	MGC	copper	7440-50-8	3.7480	5.715%	1.482%
		Core	HL832NXA	MGC	Thermosetting resin (Including filler)	Trade secret	18.1869	27.732%	7.192%
					including bisphenol A	80-05-7	0.6558	1.000%	0.259%
					Glass cloth	65997-17-3	18.8427	28.732%	7.452%
		Solder mask	PSR-4000 AUS320	TAIYO	Cured Resin	Trade secret	2.9610	4.515%	1.171%
					Phthalocyanine blue	147-14-8	0.0131	0.020%	0.005%
					Organic pigment	Trade secret	0.0131	0.020%	0.005%
					Silica	Trade secret	0.3692	0.563%	0.146%
					Barium sulfate	7727-43-7	0.3692	0.563%	0.146%
					Talc	14807-96-6	0.3692	0.563%	0.146%
					Antifoamer and Leveling agent	Trade secret	0.0780	0.119%	0.031%
					Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	0.1705	0.260%	0.067%
					Silica(Fused)(1)	60676-86-0	91.8974	75.200%	36.343%
					Silica(Fused)(2)	7631-86-9	3.6661	3.000%	1.450%
5	Compound	Compound	KE-G2250AH-W3E-E-V	KYOCERA	Epoxy resin(1)	UNDISCLOSED	12.2204	10.000%	4.833%
					Epoxy resin(2)	UNDISCLOSED	3.6661	3.000%	1.450%
					Phenol resin(1)	UNDISCLOSED	6.7212	5.500%	2.658%
					Phenol resin(2)	UNDISCLOSED	3.6661	3.000%	1.450%
					Carbon black	1333-86-4	0.3666	0.300%	0.145%
					Barium oxide, obtained by calcining witherite	1304-28-5	0.2400	40.000%	0.095%
					Titanium dioxide	13463-67-7	0.1200	20.000%	0.047%
6	Capacitor	Capacitor	Ceramic ZB	Murata	Misc	-	0.0400	6.670%	0.016%
			Electrode ZD	Murata	Nickel	7440-02-0	0.0145	2.420%	0.006%
			Electrode ZG	Murata	Copper (Cu); Copper (metallic)	7440-50-8	0.1244	20.730%	0.049%
					Silicon dioxide	7631-86-9	0.0111	1.850%	0.004%
					Diboron trioxide; Boric oxide	1303-86-2	0.0027	0.450%	0.001%
			Ni plating	Murata	Nickel	7440-02-0	0.0127	2.120%	0.005%
			Sn plating	Murata	Tin	7440-31-5	0.0346	5.760%	0.014%
7	Solder Ball	Solder Ball	M770GE	Senju	Tin	7440-31-5	22.4602	97.180%	8.882%
					Silver	7440-22-4	0.4622	2.000%	0.183%
					Copper	7440-50-8	0.1733	0.750%	0.069%
					Nickel	7440-02-0	0.0162	0.070%	0.006%
8	Tin Paste	Tin Paste	CR32 96SC ADP88	Henkel	Tin	7440-31-5	0.0953	77.500%	0.038%
					Silver	7440-22-4	0.0068	5.500%	0.003%
					Rosin	8050-09-7	0.0068	5.500%	0.003%
					Rosin, reaction products with acrylic acid, hydrogenated	144413-22-9	0.0068	5.500%	0.003%
					Resin acids and Rosin acids, hydrogenated, Me esters	8050-15-5	0.0068	5.500%	0.003%
					Copper	7440-50-8	0.0006	0.500%	0.000%
9	Wafer	Die	Die	Samsung	Si	7440-21-3	33.5940	100.000%	13.285%
10	Wafer	Die	Die	UMC	Si	7440-21-3	2.9720	100.000%	1.175%
							252.8640	1000.000%	100.000%