



ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C4G8D4-62BCN						
Part Weight:		186mg						
Part Name	Subdiscrete	Subdiscrete Type	Component wt (mg)	Component wt (%)	Material Content (Element)	CAS #	Element wt (%)	Element wt (mg)
Bond Wire	Gold	Mixed 7	0.5208	0.28				
					GOLD	7440-57-5	99	0.515592
					palladium	7440-05-3	1	0.005208
Die	Micron	Aluminum Copper	41.1804	22.14				
					ALUMINIUM	7429-90-5	0.16	0.06588864
					COPPER	7440-50-8	0.03	0.01235412
					SILICON	7440-21-3	99.2	40.8509568
					titanium	7440-32-6	0.026	0.010706904
					tungsten	7440-33-7	0.584	0.240493536
Die Attach	Film	Standard	16.1076	8.66				
					Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	29690-82-2	80	12.88608
					Silane, dichlorodimethyl-, reaction products with silica	68611-44-9	20	3.22152
Encapsulant	Epoxy Mold Compound	Green	59.427	31.95				
					4,4'-Dihydroxy-3,3',5,5'-tetramethyldiphenylmethane diglycidyl ether	93705-66-9	8	4.75416
					ALUMINIUM HYDROXIDE	21645-51-2	3	1.78281
					BENZALDEHYDE, HYDROXY-, POLYMER WITH PHENOL	106466-55-1	5	2.97135
					CARBON BLACK	1333-86-4	1	0.59427
					SILICA, VITREOUS	60676-86-0	83	49.32441
Interposer Core	BT Substrate	Green 2	16.7586	9.01				
					1,1'-(methylenedi-p-phenylene)bismaleimide	13676-54-5	11.5	1.927239
					Cyanic acid, (1-methylethylidene)di-4,1-phenylene ester, homopolymer	25722-66-1	8.5	1.424481
					Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	29690-82-2	9.3	1.5585498
					FORMALDEHYDE, POLYMER WITH 2-(CHLOROMETHYL)OXIRANE AND PHENOL	9003-36-5	9	1.508274
					GLASS, OXIDE, CHEMICALS	65997-17-3	53.5	8.965851
					magnesium silicate	13776-74-4	1	0.167586
					SILICA	7631-86-9	7.2	1.2066192
Interposer SolderMask	Ink	Epoxy	4.1478	2.23				
					Oxirane, 2,2'-[[[(oxiranylmethoxy)phenyl]methylene]bis[[[1,1-dimethylethyl)methylphenylene]oxymethylene]]bis-polychloro copper phthalocyanine	129915-35-1	99.5	4.127061
						1328-53-6	0.5	0.020739
Interposer Surface Finish	Surface Finish	Gold	0.0186	0.01				
					GOLD	7440-57-5	100	0.0186
Interposer Surface Finish 2	Surface Finish	Nickel	0.1116	0.06				
					NICKEL	7440-02-0	100	0.1116
Interposer Surface Finish 3	Surface Finish	Copper	5.859	3.15				
					COPPER	7440-50-8	100	5.859
Interposer Surface Finish 4	-	Palladium	0.0186	0.01				
					palladium	7440-05-3	100	0.0186
Solder	Balls	SAC Q	41.85	22.5				
					BISMUTH	7440-69-9	3	1.2555
					COPPER	7440-50-8	0.5	0.20925
					NICKEL	7440-02-0	0.05	0.020925
					SILVER	7440-22-4	4	1.674
					TIN	7440-31-5	92.45	38.690325
					Total Weight			186