



ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C1G8D4B-62BCN						
Part Weight:		171mg						
Part Name	Subdiscrete	Subdiscrete Type	Component wt (mg)	Component wt (%)	Material Content (Element)	CAS #	Element wt (%)	Element wt (mg)
Bond Wire	Gold	Mixed 7	0.2394	0.14	GOLD	7440-57-5	99	0.237006
					palladium	7440-05-3	1	0.002394
Die	Micron	Aluminum Copper	7.7121	4.51	ALUMINIUM	7429-90-5	0.16	0.01233936
					COPPER	7440-50-8	0.03	0.00231363
					SILICON	7440-21-3	99.2	7.6504032
					titanium	7440-32-6	0.026	0.002005146
					tungsten	7440-33-7	0.584	0.045038664
Die Attach	BMI/Epoxy Paste	Silica/Rubber	2.4111	1.41	1,1'-(methylenedi-p-phenylene)bismaleimide	13676-54-5	40	0.96444
					FORMALDEHYDE, POLYMER WITH 2-(CHLOROMETHYL)OXIRANE AND PHENOL	9003-36-5	20	0.48222
					SILICA, VITREOUS	60676-86-0	40	0.96444
Encapsulant	Epoxy Mold Compound	Green	79.002	46.2	4,4'-Dihydroxy-3,3',5,5'-tetramethyldiphenylmethane diglycidyl ether	93705-66-9	8	6.32016
					ALUMINIUM HYDROXIDE	21645-51-2	3	2.37006
					BENZALDEHYDE, HYDROXY-, POLYMER WITH PHENOL	106466-55-1	5	3.9501
					CARBON BLACK	1333-86-4	1	0.79002
					SILICA, VITREOUS	60676-86-0	83	65.57166
Interposer Core	BT Substrate	Green 2	18.4338	10.78	1,1'-(methylenedi-p-phenylene)bismaleimide	13676-54-5	11.5	2.119887
					Cyanic acid, (1-methylethylidene)di-4,1-phenylene ester, homopolymer	25722-66-1	8.5	1.566873
					Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	29690-82-2	9.3	1.7143434
					FORMALDEHYDE, POLYMER WITH 2-(CHLOROMETHYL)OXIRANE AND PHENOL	9003-36-5	9	1.659042
					GLASS, OXIDE, CHEMICALS	65997-17-3	53.5	9.862083
					magnesium silicate	13776-74-4	1	0.184338
					SILICA	7631-86-9	7.2	1.3272336
Interposer SolderMask	Ink	Epoxy	5.0274	2.94	Oxirane, 2,2'-[[[(oxiranymethoxy)phenyl]methylene]bis[[[(1,1-dimethylethyl)methyl]phenylene]oxymethylene]]bis-	129915-35-1	99.5	5.002263
					polychloro copper phthalocyanine	1328-53-6	0.5	0.025137
Interposer Surface Finish	Surface Finish	Gold	0.0171	0.01	GOLD	7440-57-5	100	0.0171
Interposer Surface Finish 2	Surface Finish	Nickel	0.0171	0.01	NICKEL	7440-02-0	100	0.0171
Interposer Surface Finish 3	Surface Finish	Copper	2.736	1.6	COPPER	7440-50-8	100	2.736
Solder	Balls	SAC Q	55.404	32.4	BISMUTH	7440-69-9	3	1.66212
					COPPER	7440-50-8	0.5	0.27702
					NICKEL	7440-02-0	0.05	0.027702
					SILVER	7440-22-4	4	2.21616
					TIN	7440-31-5	92.45	51.220998
					Total Weight			171