



ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C1G16D4A-62BCN						
Part Weight:		201mg						
Part Name	Subdiscrete	Subdiscrete Type	Component wt (mg)	Component wt (%)	Material Content (Element)	CAS #	Element wt (%)	Element wt (mg)
Bond Wire	Gold	Mixed 7	0.2412	0.12	GOLD	7440-57-5	99	0.238788
					palladium	7440-05-3	1	0.002412
Die	Micron	Aluminum Copper	13.5675	6.75	ALUMINIUM	7429-90-5	0.16	0.021708
					COPPER	7440-50-8	0.03	0.00407025
					SILICON	7440-21-3	99.2	13.45896
					titanium	7440-32-6	0.026	0.00352755
					tungsten	7440-33-7	0.584	0.0792342
Die Attach	BMI/Epoxy Paste	Silica/Rubber	4.2411	2.11	1,1'-(methylenedi-p-phenylene)bismaleimide	13676-54-5	40	1.69644
					FORMALDEHYDE, POLYMER WITH 2-(CHLOROMETHYL)OXIRANE AND PHENOL	9003-36-5	20	0.84822
					SILICA, VITREOUS	60676-86-0	40	1.69644
Encapsulant	Epoxy Mold Compound	Green	83.9979	41.79	4,4'-Dihydroxy-3,3',5,5'-tetramethyldiphenylmethane diglycidyl ether	93705-66-9	8	6.719832
					ALUMINIUM HYDROXIDE	21645-51-2	3	2.519937
					BENZALDEHYDE, HYDROXY-, POLYMER WITH PHENOL	106466-55-1	5	4.199895
					CARBON BLACK	1333-86-4	1	0.839979
					SILICA, VITREOUS	60676-86-0	83	69.718257
Interposer Core	BT Substrate	Green 2	23.8185	11.85	1,1'-(methylenedi-p-phenylene)bismaleimide	13676-54-5	11.5	2.7391275
					Cyanic acid, (1-methylethylidene)di-4,1-phenylene ester, homopolymer	25722-66-1	8.5	2.0245725
					Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	29690-82-2	9.3	2.2151205
					FORMALDEHYDE, POLYMER WITH 2-(CHLOROMETHYL)OXIRANE AND PHENOL	9003-36-5	9	2.143665
					GLASS, OXIDE, CHEMICALS	65997-17-3	53.5	12.7428975
					magnesium silicate	13776-74-4	1	0.238185
					SILICA	7631-86-9	7.2	1.714932
Interposer SolderMask	Ink	Epoxy	6.4521	3.21	Oxirane, 2,2'-[[[(oxiranylmethoxy)phenyl]methylene]bis[[[(1,1-dimethylethyl)methylphenylene]oxymethylene]]bis-polychloro copper phthalocyanine	129915-35-1	99.5	6.4198395
						1328-53-6	0.5	0.0322605
Interposer Surface Finish	Surface Finish	Gold	0.0201	0.01	GOLD	7440-57-5	100	0.0201
Interposer Surface Finish 2	Surface Finish	Nickel	0.0201	0.01	NICKEL	7440-02-0	100	0.0201
Interposer Surface Finish 3	Surface Finish	Copper	3.4773	1.73	COPPER	7440-50-8	100	3.4773
Solder	Balls	SAC Q	65.1642	32.42	BISMUTH	7440-69-9	3	1.954926
					COPPER	7440-50-8	0.5	0.325821
					NICKEL	7440-02-0	0.05	0.0325821
					SILVER	7440-22-4	4	2.606568
					TIN	7440-31-5	92.45	60.2443029
					Total Weight			201