



ALLIANCE MEMORY MDS REPORT

Part Number:		AS4C2G16D4-62BCN						
Part Weight:		222mg						
Part Name	Subdiscrete	Subdiscrete Type	Component wt (mg)	Component wt (%)	Material Content (Element)	CAS #	Element wt (%)	Element wt (mg)
Bond Wire	Gold	Mixed 7	0.555	0.25				
					GOLD	7440-57-5	99	0.54945
					palladium	7440-05-3	1	0.00555
Die	Micron	Aluminum Copper	41.0478	18.49				
					ALUMINIUM	7429-90-5	0.16	0.06567648
					COPPER	7440-50-8	0.03	0.01231434
					SILICON	7440-21-3	99.2	40.7194176
					titanium	7440-32-6	0.026	0.010672428
					tungsten	7440-33-7	0.584	0.239719152
Die Attach	Film	Standard	16.0506	7.23				
					Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	29690-82-2	80	12.84048
					Silane, dichlorodimethyl-, reaction products with silica	68611-44-9	20	3.21012
Encapsulant	Epoxy Mold Compound	Green	78.4326	35.33				
					4,4'-Dihydroxy-3,3',5,5'-tetramethyldiphenylmethane diglycidyl ether	93705-66-9	8	6.274608
					ALUMINIUM HYDROXIDE	21645-51-2	3	2.352978
					BENZALDEHYDE, HYDROXY-, POLYMER WITH PHENOL	106466-55-1	5	3.92163
					CARBON BLACK	1333-86-4	1	0.784326
					SILICA, VITREOUS	60676-86-0	83	65.099058
Interposer Core	BT Substrate	Green 2	20.2464	9.12				
					1,1'-(methylenedi-p-phenylene)bismaleimide	13676-54-5	11.5	2.328336
					Cyanic acid, (1-methylethylidene)di-4,1-phenylene ester, homopolymer	25722-66-1	8.5	1.720944
					Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol	29690-82-2	9.3	1.8829152
					FORMALDEHYDE, POLYMER WITH 2-(CHLOROMETHYL)OXIRANE AND PHENOL	9003-36-5	9	1.822176
					GLASS, OXIDE, CHEMICALS	65997-17-3	53.5	10.831824
					magnesium silicate	13776-74-4	1	0.202464
					SILICA	7631-86-9	7.2	1.4577408
Interposer	Ink	Epoxy	5.0172	2.26				
					Oxirane, 2,2'-[[[[(oxiranylmethoxy)phenyl]methylene]bis[[[(1,1-dimethylethyl)methyl]phenylene]oxymethylene]]bis-polychloro copper phthalocyanine	129915-35-1	99.5	4.992114
Interposer	Surface Finish	Gold	0.0222	0.01				
					GOLD	7440-57-5	100	0.0222
Interposer	Surface Finish	Nickel	0.1554	0.07				
					NICKEL	7440-02-0	100	0.1554
Interposer	Surface Finish	Copper	7.3482	3.31				
					COPPER	7440-50-8	100	7.3482
Interposer	-	Palladium	0.0222	0.01				
					palladium	7440-05-3	100	0.0222
Pillar	-	Tin/Silver	1.7538	0.79				
					SILVER	7440-22-4	1.8	0.0315684
					TIN	7440-31-5	98.2	1.7222316
Solder	Balls	SAC Q	51.3486	23.13				
					BISMUTH	7440-69-9	3	1.540458
					COPPER	7440-50-8	0.5	0.256743
					NICKEL	7440-02-0	0.05	0.0256743
					SILVER	7440-22-4	4	2.053944
					TIN	7440-31-5	92.45	47.4717807
					Total Weight			222