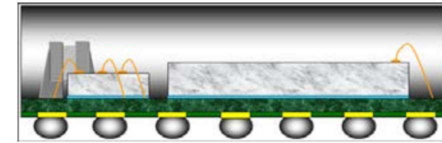
Material Declaration Sheet



-. Device : ASFC8G31M-51BIN
-. Package : 11.5 x 13.0 F153 eMMC
-. Weight (mg) : 261.9mg

Material	Substances	Vendor	Type	Purpose	CAS No.	Weight (mg)	wt % of Total unit wt	Element wt (%)	PPM
Silicon Chip 1	Silicon (Si)	**SMI**	SM2736 Controller	Circuit	-	1.720	0.66%	100.00%	6567
Silicon Chip 2	Silicon (Si)	**SEC**	8GB Nand Flash	Circuit	-	51.430	19.64%	100.00%	196372
Mold Compound	Silica, vitreous	**EM Networks**	LMC705VF	Filler	60676-86-0	106.466	40.65%	87.80%	406513
	4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethyl(1,1'-biphenyl)			Resin	85954-11-6	4.244	1.62%	3.50%	16205
	Phenol polymer with 1,4-bis(methoxymethyl)benzene			Resin	26834-02-6	3.032	1.16%	2.50%	11575
	Phenol polymer with 4,4'-bis(methoxymethyl)1,1'-bisphenyl			Resin	205830-20-2	2.910	1.11%	2.40%	11112
	Formaldehyde polymer with (chloromethyl)oxirane and 2-methylphenol			Resin	29690-82-2	3.032	1.16%	2.50%	11575
	Magnesium hydroxide			Hardener	1309-42-8	0.970	0.37%	0.80%	3704
	Carbon black			Colorant	1333-86-4	0.606	0.23%	0.50%	2315
								100.00%	
Substrate	Glass cloth	**DDE**	FBJS15304S 2H SU R.0	Base meterial, Core composition (CCL)	65997-17-3	7.100	2.71%	10.58%	27109
	Copper			Base meterial, Core composition (CCL)	7440-50-8	11.900	4.54%	17.73%	45437
	Epoxy			Base meterial, Core composition (CCL)	28906-96-9	0.900	0.34%	1.34%	3436
	Heat Resistant Resin			Base meterial, Core composition (CCL)	25722-66-1	0.900	0.34%	1.34%	3436
	Silica Filler			Base meterial, Core composition (CCL)	7631-86-9	1.500	0.57%	2.24%	5727
	Resistant Epoxy Resin			Base meterial, Core composition (CCL)	223769-10-6	0.900	0.34%	1.34%	3436
	Metal Hydroxide			Base meterial, Core composition (CCL)	1318-23-6	0.700	0.27%	1.04%	2673
	Acrylate resin			Base meterial, Solder Mask composition (PSR4000-AUS308)	Trade Secret	7.000	2.67%	10.43%	26728
	Organic pigments			Base meterial, Solder Mask composition (PSR4000-AUS308)	Trade Secret	0.100	0.04%	0.15%	382
	Phthalocyanine blue			Base meterial, Solder Mask composition (PSR4000-AUS308)	Trade Secret	0.100	0.04%	0.15%	382
	Talc (containing no asbest fibers)			Base meterial, Solder Mask composition (PSR4000-AUS308)	14807-96-6	0.700	0.27%	1.04%	2673
	Barium Sulfate			Base meterial, Solder Mask composition (PSR4000-AUS308)	7727-43-7	5.000	1.91%	7.45%	19091
	Silica			Base meterial, Solder Mask composition (PSR4000-AUS308)	Trade Secret	0.100	0.04%	0.15%	382
	2-Benzyl-2dimethylamino-1-(4-morpholino-phenyl)-1-butanone			Base meterial, Solder Mask composition (PSR4000-AUS308)	119313-12-1	0.700	0.27%	1.04%	2673
	Defoamers/leveling agent etc.			Base meterial, Solder Mask composition (PSR4000-AUS308)	Trade Secret	0.700	0.27%	1.04%	2673
	Dipropyleneglycolmonomethylether			Base meterial, Solder Mask composition (PSR4000-AUS308)	34590-94-8	1.500	0.57%	2.24%	5727
	3-methoxy-3-methylbutylacetate			Base meterial, Solder Mask composition (PSR4000-AUS308)	103429-90-9	2.900	1.11%	4.32%	11073
	Heavy Aromatic Solvent naphtha			Base meterial, Solder Mask composition (PSR4000-AUS308)	64742-94-5	0.700	0.27%	1.04%	2673
	Napthalence			Base meterial, Solder Mask composition (PSR4000-AUS308)	91-20-3	0.100	0.04%	0.15%	382
	Acrylicestermonomer			Base meterial, Solder Mask composition (CA40-AUS308)	Trade Secret	2.900	1.11%	4.32%	11073
	Epoxy resin			Base meterial, Solder Mask composition (CA40-AUS308)	Trade Secret	9.000	3.44%	13.41%	34364
	Organic filler			Base meterial, Solder Mask composition (CA40-AUS308)	Trade Secret	0.700	0.27%	1.04%	2673
	Barium Sulfate			Base meterial, Solder Mask composition (CA40-AUS308)	7727-43-7	5.400	2.06%	8.05%	20618
	Dipropyleneglycolmonomethylether*)1-(2-methoxy-2-methylethoxy)-2-propanol			Base meterial, Solder Mask composition (CA40-AUS308)	34590-94-8	1.400	0.53%	2.09%	5346
	3-methoxy-3-methylbutylacetate			Base meterial, Solder Mask composition (CA40-AUS308)	103429-90-9	0.700	0.27%	1.04%	2673
	Nickel			Surface treatment	7440-02-0	2.800	1.07%	4.17%	10691
	Gold Potassium Cyanide			Surface treatment	13967-50-5	0.700	0.27%	1.04%	2673
								100.00%	
Solder paste	tin	**Alpha**	WS693CPS	Soldering	7440-31-5	0.740	0.28%	87.00%	2824
	surfactant				-	0.026	0.01%	3.00%	97
	silver				7440-22-4	0.026	0.01%	3.00%	97
	Alkoxylated alcohol.				-	0.026	0.01%	3.00%	97
	Organic acid				-	0.026	0.01%	3.00%	97
	2,2'-iminodiethanol				111-42-2	0.004	0.00%	0.50%	16
	surfactant				-	0.004	0.00%	0.50%	16
								100.00%	
Capacitor	Barium titanate(IV)	**TayoYuden**	1uf/6.3V/X5R/C0603/0.3T	Principle component	12047-27-7	0.260	0.10%	81.25%	993
	Nickel				7440-02-0	0.044	0.02%	13.75%	168
	Copper				7440-50-8	0.008	0.00%	2.50%	31
	Tin				7440-31-5	0.008	0.00%	2.50%	31
								100.00%	
Die Attach Material (Tape 1)	Epoxy	**INNOX**	IDU5C0-20T	Adhesive materials for die to die, die to sub UV Cure type dicing tape	29690-82-2	0.024	0.01%	20.00%	92
	Acrylate copolymer				Trade secret	0.024	0.01%	20.00%	92
	Hardener				Trade secret	0.012	0.00%	10.00%	46
	Silica				7631-86-9	0.060	0.02%	50.00%	229
								100.00%	
Die Attach Material (Tape 2)	Epoxy	**INNOX**	IDU0B3L-20T	Adhesive materials for die to die, die to sub UV Cure type dicing tape	29690-82-2	0.530	0.20%	20.00%	2024
	Acrylate copolymer				Trade secret	0.530	0.20%	20.00%	2024
	Hardener				Trade secret	0.265	0.10%	10.00%	1012
	Silica				7631-86-9	1.325	0.51%	50.00%	5059
								100.00%	
Wire	Gold	**LT Metal**	HP 0.8mil	Balance Material	7440-57-5	0.386	0.15%	99.99%	1474
	Others				Trade secret	0.000	0.00%	0.01%	0.1
								100.00%	
Solder Ball	Tin	**DSH**	0.3mm (Sn/3.0Ag/0.5Cu)	Remain	7440-31-5	15.503	5.92%	96.50%	59193
	Silver			Conductivity Improvement	7440-22-4	0.482	0.18%	3.00%	1840
	Copper			Heat resistance improvement	7440-50-8	0.080	0.03%	0.50%	307
								100.00%	
					Total	261.90	100.0%		1000000.0

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