Device Material Content

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November, 2020

Package: **64 ucfBGA**
Total Device Weight **22.93** **Milligrams**

Package Code: **UMG64**
Products: LIF-MD6000 (Crosslink)

Assembly: ASET
Size (mm): 3.5 x 3.5
Lead pitch (mm): 0.4
MSL: 3
Reflow max (ºC): 260

	% of Total Pkg. Wt.	**Weight (mg)**	**% of Total Pkg. Wt.**	**Weight (mg)**	**Substance**	**CAS #**	**% of Subst.**	**Notes / Assumptions:**
Die	22.79%	5.225	22.79%	5.2251	Silicon chip	7440-21-3	100.00%	Die size: 2.51 x 2.56mm
Substrate	6.41%	1.470	2.05%	0.4704	BT Resin	-	32.00%	CCL-HL 832NS
			4.36%	0.9995	Glass Fiber	65997-17-3	68.00%	
Foil	9.43%	2.163	9.425%	2.1612	Copper (Cu)	7440-50-8	99.89%	
			0.010%	0.0023	OSP	-	0.11%	
Solder Mask	0.80%	0.183	0.087%	0.0199	Diethylene glycol monoethyl ether acetate	112-15-2	10.85%	Solder mask PFR800 Aus410
			0.002%	0.0003	Phthalocyanine blue	147-14-8	0.19%	
			0.025%	0.0057	Talc (containing no asbestiform fibers)	14807-96-6	3.13%	
			0.043%	0.0098	Dipropylene glycol monomethyl ether	34590-94-8	5.36%	
			0.079%	0.0180	Solvent naphtha(petroleum), Heavy arom.	64742-94-5	9.83%	
			0.006%	0.0014	Silica, amorphous	7631-86-9	0.78%	
			0.114%	0.0260	Barium sulfate	7727-43-7	14.19%	
			0.013%	0.0029	Dipropylene glycol monomethyl ether acetate	88917-22-0	1.59%	
			0.006%	0.0015	Naphthalene (Carc . Cat. 3 ; R40)	91-20-3	0.81%	
			0.005%	0.0011	Deionized water	7732-18-5	0.59%	
			0.421%	0.0966	Other (Trade secret)	-	52.67%	
Repassivation polyimide	0.10%	0.023	0.06%	0.0126	N-Methyl-2-pyrrolidone	872-50-4	55.00%	HD4000E
			0.01%	0.0011	Proprietary Monomer	-	5.00%	
			0.00%	0.0001	Methanol	67-56-1	0.50%	
			0.04%	0.0091	Non regulated ingredients	-	39.50%	
UBM	0.07%	0.016	0.01%	0.0033	Titanium (Ti)	7440-32-6	20.25%	
			0.06%	0.0128	Copper (Cu)	7440-50-8	79.75%	
Bump	5.94%	1.362	4.79%	1.0994	Tin (Sn)	7440-31-5	80.72%	
			0.09%	0.0202	Silver (Ag)	7440-22-4	1.48%	
			0.84%	0.1920	Nickel (Ni)	7440-02-0	14.1%	
			0.22%	0.0505	Copper (Cu)	7440-50-8	3.71%	
Mold Compound	37.53%	8.606	2.06%	0.4733	Epoxy Resin	-	5.50%	EME-G311SA Type C
			1.88%	0.4303	Phenol Resin	-	5.00%	
			0.94%	0.2151	Metal Hydroxide	-	2.50%	
			0.19%	0.0430	Carbon Black	1333-86-4	0.50%	
			26.65%	6.1100	Silica (Amorphous) A	60676-86-0	71.00%	
			5.82%	1.3339	Silica (Amorphous) B	7631-86-9	15.50%	
Solder Balls	16.93%	3.882	16.63%	3.8141	Tin (Sn)	7440-31-5	98.25%	Sn98.25/Ag1.2/Cu0.5/ Ni0.05
			0.20%	0.0466	Silver (Ag)	7440-22-4	1.20%	
			0.08%	0.0194	Copper (Cu)	7440-50-8	0.50%	
			0.01%	0.0019	Nickel (Ni)	7440-02-0	0.05%	

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Br/Cl/Sb lead-free RoHS

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