



Device Material Content

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Package: 121 csBGA
Total Device Weight 72.01 **Milligrams**

Package Code:

MG121

Products:

LFD2NX

Assembly: ASEK

Size (mm): 6 x 6

Lead pitch (mm): 0.5

MSL: 3

Reflow max (°C): 260

	% of Total Pkg. Wt.	Weight (mg)	% of Total Pkg. Wt.	Weight (mg)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	9.96%	7.172	9.96%	7.172	Silicon chip	7440-21-3	100.00%	Die size: 4.09 x 3.77 mm
Mold Compound	33.82%	24.357	4.06%	2.923	Epoxy Resin	-	12.00%	Mold compound: Sumitomo EME-G311SA Type C
			1.69%	1.218	Phenol Resin B	-	5.00%	
			25.37%	18.268	Silica(Amorphous)	7631-86-9	75.00%	
			2.54%	1.827	Aluminum Hydroxide	21645-51-2	7.50%	
			0.17%	0.122	Carbon Black	1333-86-4	0.50%	
Substrate	11.25%	8.100	3.60%	2.592	BT Resin	-	32.00%	MGC CCL-HL832NS
			7.65%	5.508	Glass Fiber	65997-17-3	68.00%	
Foil	20.61%	14.842	20.60%	14.838	Copper (Cu)	7440-50-8	99.97%	
			0.01%	0.004	OSP	7440-22-4	0.03%	
Solder Mask	0.86%	0.622	4.85%	3.490	Solvent naphtha (petroleum)	64742-94-5	23.52%	PFR800 AUS 320
			1.21%	0.872	Naphthalene	91-20-3	5.87%	
			3.03%	2.182	Phosphin oxide derivative	-	14.70%	
			3.03%	2.182	Talc	14807-96-6	14.70%	
			3.63%	2.617	Dipropylene glycol monomethyl Ether	34590-94-8	17.63%	
			3.03%	2.182	Epoxy Resin	85954-11-6	14.70%	
			1.83%	1.318	Barium Sulfate	7727-43-7	8.88%	
Solder Bump	2.20%	1.585	7.620%	5.48709	Tin (Sn)	7440-31-5	36.97%	
			0.143%	0.10300	Silver (Ag)	7440-22-4	0.7%	
			9.363%	6.74198	Nickel (Ni)	7440-02-0	45.43%	
			3.485%	2.50949	Copper (Cu)	7440-50-8	16.91%	
UBM	0.84%	0.606	0.07%	0.047	Titanium (Ti)	7440-32-6	7.74%	
			0.78%	0.559	Copper (Cu)	7440-50-8	92.26%	
RDL	1.58%	1.138	1.58%	1.1380	Titanium (Ti)	7440-32-6	100.00%	
			1.58%	1.1380	Copper (Cu)	7440-50-8	100.00%	
Repassivation Polyimide	0.25%	0.178	0.136%	0.0979	N-Methyl-2-pyrrolidone	872-50-4	55.00%	HD4000E
			0.012%	0.0089	Proprietary Monomer	-	5.00%	
			0.001%	0.0009	Methanol	67-56-1	0.50%	
			0.098%	0.0703	Non regulated ingredients	-	39.50%	
Solder Balls	18.62%	13.410	17.97%	12.941	Tin (Sn)	7440-31-5	96.50%	SAC305
			0.56%	0.402	Silver (Ag)	7440-22-4	3.00%	
			0.09%	0.067	Copper (Cu)	7440-50-8	0.50%	

Notes:

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