



Device Material Content

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Assembly: ATP
Size (mm): 14 x 14

Package Code:

BG256

Lead pitch (mm): 0.8

Package: 256 caBGA
Total Device Weight: 0.497 Grams

Products:

LCMXO3-9400

MSL: 3

Reflow max (°C): 260

July, 2019

	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	2.75%	0.0137			Silicon chip	7440-21-3	100.00%	Die size: 5.1 x 4.9 x 0.228 mm
Mold Compound	51.66%	0.2566	3.62%	0.0180	Solid Epoxy Resin	-	7.00%	Mold Compound: Hitachi GE-110LS-V
			2.58%	0.0128	Phenol Resin	-	5.00%	
			43.91%	0.2181	Silica	60676-86-0	85.00%	
			1.29%	0.0064	Metal Hydroxide	-	2.50%	
			0.26%	0.0013	Carbon Black	1333-86-4	0.50%	
D/A Epoxy	0.38%	0.0019	0.33%	0.00165	Silver	7440-22-4	87.00%	Die attach epoxy: Henkel QMI-529HT
			0.03%	0.00013	Isobornyl Methacrylate	7534-94-3	7.00%	
			0.002%	0.00001	2-(3,4-Epoxy)cyclohexyl)ethyltrimethoxysilane	3388-04-3	0.50%	
			0.02%	0.00010	Additive	-	5.00%	
Wire	0.60%	0.0030	0.59%	0.0029	Copper (Cu)	7440-50-8	97.90%	MKE Cu wire(Pd coated), 0.02mm dia
			0.01%	0.0001	Palladium (Pd)	7440-05-3	2.10%	
Solder Balls	18.05%	0.0897	17.42%	0.0866	Tin (Sn)	7440-31-5	96.50%	SAC305
			0.54%	0.0027	Silver (Ag)	7440-22-4	3.00%	
			0.09%	0.0004	Copper (Cu)	7440-50-8	0.50%	
Substrate	16.70%	0.0830	0.00%	0.0000	BT Resins	-	32.00%	BT Resin CCL-HL832NX-A*
			0.00%	0.0000	Glass fiber	65997-17-3	68.00%	
Foil	5.87%	0.0292	4.59%	0.0228	Copper	7440-50-8	78.16%	
			1.07%	0.0053	Nickel plating	7440-02-0	18.31%	
			0.21%	0.0010	Gold plating	7440-57-5	3.53%	
Solder Mask	3.98%	0.0198	0.00%	0.0000	Quartz	14808-60-7	54.37%	Solder mask PSR4000 AUS 308
			0.00%	0.0000	Dipropylene glycol monomethyl ether	34590-94-8	7.33%	
			0.00%	0.0000	Morpholine derivative	71868-10-5	3.32%	
			0.00%	0.0000	Silicon dioxide	7631-86-9	3.00%	
			0.00%	0.0000	Silica, amorphous	112945-52-5	3.00%	
			0.00%	0.0000	Carbon black	1333-86-4	0.24%	
			0.00%	0.0000	Trade secret ingredients	-	28.74%	

Notes: * 0.17% max. concentration (of total pkg wt.) of Bisphenol A (CAS# 80-05-7), contained in substrate laminate material as impurity - not intentionally added.

The values listed above are nominal values based on studies of representatives of this particular package type, and are believed to be as accurate as possible.

Constituent substances and proportions in epoxy materials are before curing.

The information provided above is representative of the package as of the date listed, and is subject to change at any time.

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