



## Device Material Content

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**Package:** 256 caBGA  
**Total Device Weight** 0.520 Grams

**Package Code:**

BG256

**Products:**

LCMXO3D

Assembly: ATK  
Size (mm): 14 x 14

Lead pitch (mm): 0.8

MSL: 3

Reflow max (°C): 260

	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	% of Subst.	Notes / Assumptions:
<b>Die</b>	4.09%	0.0213			Silicon chip	7440-21-3	100.00%	Die size: 5.23 x 6.26 x 0.279 mm
<b>Mold Compound</b>	49.24%	0.2560	1.48%	0.00768	Epoxy Resin A	-	3.00%	Mold Compound: Sumitomo EME G770SFE
			1.48%	0.00768	Epoxy Resin B	-	3.00%	
			1.48%	0.00768	Phenol Resin	-	3.00%	
			35.70%	0.18563	Silica, vitreous	60676-86-0	72.50%	
			7.39%	0.03841	Silicon dioxide	7631-86-9	15.00%	
			1.48%	0.00768	Aluminium and its compounds	-	3.00%	
			0.25%	0.00128	Carbon Black	1333-86-4	0.50%	
<b>D/A Epoxy</b>	0.69%	0.0036	0.59%	0.00305	Silver	7440-22-4	85.00%	Die attach epoxy: Henkel QMI-529HT
			0.07%	0.00036	Isobornyl Methacrylate	7534-94-3	10.00%	
			0.03%	0.00018	Bismaleimide Resin	-	5.00%	
<b>Wire</b>	0.36%	0.0019	0.35%	0.00182	Copper (Cu)	7440-50-8	97.05%	Au coated PCC, 0.02mm dia
			0.01%	0.00005	Palladium (Pd)	7440-05-3	2.80%	
			0.00%	0.000003	Gold (Au)	7440-57-5	0.15%	
<b>Solder Balls</b>	17.39%	0.0904	16.78%	0.0873	Tin (Sn)	7440-31-5	96.50%	MKE SAC305
			0.52%	0.00271	Silver (Ag)	7440-22-4	3.00%	
			0.09%	0.00045	Copper (Cu)	7440-50-8	0.50%	
<b>Substrate</b>	15.07%	0.0784	4.14%	0.0216	BT Resins	-	27.50%	BT Resin CCL-HL832NX-A* 2 layer
			4.14%	0.0216	Inorganic filler	21645-51-2	27.50%	
			6.78%	0.0353	Glass fiber	65997-17-3	45.00%	
<b>Solder mask</b>	2.09%	0.0109	1.58%	0.00821	Resin	-	75.50%	Solder mask PSR4000 AUS 320
			0.00%	0.00002	Phthalocyanine blue	147-14-8	0.20%	
			0.00%	0.00002	Organic pigment	-	0.20%	
			0.01%	0.00005	Silica	-	0.50%	
			0.43%	0.00226	Barium sulfate	7727-43-7	20.80%	
			0.04%	0.00023	Talc	14807-96-6	2.10%	
			0.01%	0.00008	Antifoamer and Leveling agent	-	0.70%	
<b>Foil</b>	11.08%	0.0576	8.47%	0.0537	Copper	7440-50-8	93.17%	
			5.90%	0.0032	Nickel plating	7440-02-0	5.62%	
			1.28%	0.0007	Gold plating	7440-57-5	1.21%	

**Notes:** \* 0.15% max. concentration of Bisphenol A (CAS# 80-05-7) 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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