



Device Material Content

5555 NE Moore Ct. Hillsboro OR 97124 custreq@latticesemi.com		Package: 256 caBGA Total Device Weight 327.63 Milligrams		Package Code: <div style="border: 1px solid black; padding: 2px; display: inline-block;">BG256</div> Products: <div style="border: 1px solid black; padding: 2px; display: inline-block;">LAMXO3D/LF</div>		Assembly: ASEK Size (mm): 14 x 14 Lead pitch (mm): 0.8 MSL: 3 Reflow max (°C): 260		
December, 2020								
	% of Total Pkg. Wt.	Weight (mg)	% of Total Pkg. Wt.	Weight (mg)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	4.73%	15.50			Silicon chip	7440-21-3	100.00%	Die size: 3.95 x 5.55 mm
Mold Compound	32.01%	104.87	24.01%	78.656	Aluminum oxide	1344-28-1	75.00%	Mold Compound: Kyocera KE-G1250AHT
			4.00%	13.109	Silica(Fused)	60676-86-0	12.50%	
			1.92%	6.292	Epoxy resin	-	6.00%	
			1.92%	6.292	Phenol resin	-	6.00%	
			0.16%	0.524	Carbon Black	1333-86-4	0.50%	
D/A Epoxy	1.70%	5.57	1.36%	4.456	Silver	7440-22-4	80.00%	Die attach epoxy: Henkel (Ablebond) 2100A
			0.34%	1.114	Esters & resins	-	20.00%	
Wire	0.57%	1.87	0.55%	1.803	Copper (Cu)	7440-50-8	96.55%	Au coated PCC, 0.02mm dia
			0.02%	0.058	Palladium (Pd)	7440-05-3	3.10%	
			0.00%	0.007	Gold (Au)	7440-57-5	0.35%	
Solder Balls	21.84%	71.55	21.08%	69.050	Tin (Sn)	7440-31-5	96.50%	SAC305
			0.66%	2.147	Silver (Ag)	7440-22-4	3.00%	
			0.11%	0.358	Copper (Cu)	7440-50-8	0.50%	
Substrate	13.70%	44.90	4.38%	14.366	BT Resins	-	32.00%	BT Resin CCL-HL832NX-A
			9.32%	30.529	Glass fiber	65997-17-3	68.00%	
Solder mask	6.66%	21.82	1.57%	5.131	Solvent naphtha (petroleum)	64742-94-5	23.52%	Solder mask PSR4000 AUS 320
			0.39%	1.282	Naphthalene	91-20-3	5.87%	
			0.98%	3.208	Phosphin oxide derivative	-	14.70%	
			0.98%	3.208	Talc (containing no asbestiform fibers)	14807-96-6	14.70%	
			1.17%	3.847	Dipropylene glycol monomethyl Ether	34590-94-8	17.63%	
			0.98%	3.208	Epoxy Resin	85954-11-6	14.70%	
			0.59%	1.938	Barium Sulfate	7727-43-7	8.88%	
Foil	18.79%	61.56	17.51%	57.356	Copper	7440-50-8	93.17%	
			1.06%	3.460	Nickel	7440-02-0	5.62%	
			0.23%	0.748	Gold	7440-57-5	1.21%	

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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