



Device Material Content

5555 NE Moore Ct. Hillsboro OR 97124 custreq@latticesemi.com					Package Code: BFG256		Assembly: ASEKH Size (mm): 17 x 17	
Package: 256 ftBGA Total Device Weight 854.2 mg					Products: XO4D		Lead pitch (mm): 1.0 MSL: 3 Reflow max (°C): 260	
July, 2026	% of Total Pkg. Wt.	Weight (mg)	% of Total Pkg. Wt.	Weight (mg)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	1.215%	10.379	1.215%	10.3793	Silicon chip	7440-21-3	100.00%	Die size: 3.95 x 5.55 mm
Mold Compound	64.069%	547.259	48.391%	413.3376	Aluminum oxide	1344-28-1	75.53%	Kyocera KE-G1250AHT
			6.452%	55.1117	Silica(Fused)(1)	60676-86-0	10.07%	
			3.549%	30.3114	Silica(Fused)(2)	7631-86-9	5.54%	
			3.549%	30.3114	Epoxy resin	TRADE SECRET	5.54%	
			1.936%	16.5335	Phenol resin	TRADE SECRET	3.02%	
			0.194%	1.6534	Carbon Black	1333-86-4	0.30%	
D/A Epoxy	0.44%	3.7425	0.377%	3.22191	Silver (Ag)	7440-22-4	86.09%	Henkel (Ablebond) 2100A
			0.026%	0.22156	2,2-dimethyl-1,3 Propanediyl Bismethacrylate	1985-51-9	5.92%	
			0.022%	0.18413	A mixture of: 4-allyl-2,6-bis(2,3-epoxypropyl)phenol	-	4.92%	
			0.004%	0.03742	Perfluoropolyoxyalkane ether	925918-64-5	1.00%	
			0.008%	0.07036	2-[[[2,2 bis[[[1-oxoallyloxy]methyl]butoxy]methyl]-2 ethyl-1,3-propanediyl diacrylate	94108-97-1	1.88%	
			0.001%	0.00711	bis(4-tert-butylcyclohexyl) peroxydicarbonate	15520-11-3	0.19%	
Wire	0.26%	2.2290	0.26%	2.1905	Copper	7440-50-8	98.28%	0.8 mil diameter; 1 wire per solder ball NMC EX1P+_CuPdAu+
			0.004%	0.0345	Palladium	2023568	1.55%	
			0.0005%	0.0039	Gold	7440-57-5	0.18%	
Solder Balls	11.49%	98.1608	11.08%	94.6761	Tin	7440-31-5	96.45%	96.45SN/3.0AG/0.5CU/0.05NI_0.5MM PMT
			0.34%	2.9448	Silver	7440-22-4	3.00%	
			0.06%	0.4908	Copper	7440-50-8	0.50%	
			0.01%	0.0491	Nickel	7440-02-0	0.05%	
Substrate	22.52%	192.40	0.28%	2.4214	Barium Sulfate	7727-43-7	1.26%	CCL-HL832NX (Type A) PSR-800 AUS SR1
			0.09%	0.8071	Silica	7631-86-9	0.42%	
			0.03%	0.2421	Talc	14807-96-6	0.13%	
			0.51%	4.3586	Epoxy Resin	85954-11-6	2.27%	
			0.03%	0.2421	Phosphin oxide derivative	Trade secret	0.13%	
			4.47%	38.1480	Continuous Filament Fiber Glass	65997-17-3	19.83%	
						105391-33-1		
			7.31%	62.4240	Bismaleimide Triazine , Epoxy Resin	25722-66-1	32.45%	
						9003-36-5		
			1.76%	15.0280	Inorganic filler	21645-51-2	7.81%	
			2.72%	23.2155	Copper	7440-50-8	12.07%	
			4.76%	40.6272	Copper	7440-50-8	21.12%	
			0.48%	4.0851	Nickel	7440-02-0	2.12%	
			0.09%	0.7973	Gold	7440-57-5	0.41%	

Note:

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