



Device Material Content

5555 NE Moore Ct.
Hillsboro OR 97124
custreq@latticesemi.com

Assembly: ASEM
Size (mm): 17 x 17 x 1.86
Lead pitch (mm): 1.0
MSL: 3
Reflow max (°C): 250

June, 2025

Package: 256 fpBGA
Total Device Weight: 1.071 Grams

Package Code:

FN256

Products:

LFE2/2M

	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	1.46%	0.0157	1.46%	0.0157	Silicon chip	7440-21-3	100.00%	
Mold Compound	29.72%	0.3184	2.08%	0.0223	Epoxy Resin	-	7.00%	Mold Compound: Sumitomo G750SE (ULA)
			1.49%	0.0159	Phenol Novolac	9003-35-4	5.00%	
			1.49%	0.0159	Metal Hydroxide	-	5.00%	
			0.15%	0.0016	Carbon Black	1333-86-4	0.50%	
			24.52%	0.2626	Silica Fused	60676-86-0	82.50%	
D/A Epoxy	0.19%	0.0021	0.16%	0.00170	Silver (Ag)	7440-22-4	82.43%	Die attach epoxy: Henkel (Ablebond) ABL 2100A
			0.01%	0.00012	2,2-dimethyl-1,3 Propanediyl Bismethacrylate	1985-51-9	5.67%	
			0.01%	0.00012	A mixture of: 4-allyl-2,6-bis(2,3-epoxypropyl)phenol	-	5.67%	
			0.01%	0.00012	2-[[2,2 bis[[1-(oxoallyloxy)methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate	94108-97-1	5.67%	
			0.001%	0.00001	bis(4-tert-butylcyclohexyl) peroxydicarbonate	15520-11-3	0.57%	
Wire	0.29%	0.0031	0.280%	0.00300	Copper	7440-50-8	96.55%	0.8 mil diameter; 1 wire per solder ball AuPCC
			0.009%	0.00010	Palladium	7440-05-3	3.10%	
			0.001%	0.00001	Gold	7440-57-5	0.35%	
Solder Balls	22.65%	0.2426	21.86%	0.2341	Tin (Sn)	7440-31-5	96.50%	SAC305
			0.68%	0.0073	Silver (Ag)	7440-22-4	3.00%	
			0.11%	0.0012	Copper (Cu)	7440-50-8	0.50%	
Substrate	24.47%	0.2621	7.83%	0.0839	BT Resins	-	32.00%	BT Resin CCL-HL832NX-A
			16.64%	0.1782	Glass fiber	65997-17-3	68.00%	
Foil	16.97%	0.1817	15.42%	0.1651	Copper	7440-50-8	90.87%	
			1.47%	0.0157	Nickel plating	7440-02-0	8.64%	
			0.08%	0.0009	Gold plating	7440-57-5	0.48%	
Solder Mask	4.24%	0.0455	2.39%	0.0255	Quartz	14808-60-7	56.20%	Solder mask PSR4000 AUS 308
			0.68%	0.0073	3-methoxy-3-methylbutylacetate	103429-90-9	16.00%	
			0.93%	0.0100	Barium Sulfate	7727-43-7	22.00%	
			0.13%	0.0014	Talc (containing no asbestiform fibers)	14807-96-6	3.00%	
			0.12%	0.0013	Trade secret ingredients	-	2.80%	

100.00% 1.071 100.000% 1.071

Note:

Lattice regards this materials information to be correct but makes no guarantee as to its accuracy or completeness, including, but not limited to, with respect to its compliance with applicable environmental laws and regulations. Lattice subcontracts the production, test and assembly of hardware devices to independent third-party vendors and materials suppliers ("Contractors"). All data provided hereunder is based on information received from Contractors. Lattice has not independently verified the accuracy or completeness of this information which is provided solely for your reference in connection with the use of Lattice products.

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MSL: 3
Reflow max (°C): 250

June, 2025

Package: 256 fpBGA
Total Device Weight: 1.071 Grams

Package Code: **FN256**
Products: LFE2/2M

	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	1.462%	0.0157	1.46%	0.0157	Silicon chip	7440-21-3	100.00%	
Mold Compound	29.725%	0.3184	1.49%	0.0159	Epoxy Resin	-	5.00%	Mold Compound: Hitachi CEL9750ZHF10AKL-U (ULA)
			1.49%	0.0159	Phenol Resin	-	5.00%	
			0.06%	0.0006	Carbon Black	1333-86-4	0.20%	
			26.10%	0.2795	Silica	60676-86-0	87.80%	
			0.59%	0.0064	Others	-	2.00%	
D/A Epoxy	0.193%	0.00207	0.166%	0.00178	Silver (Ag)	7440-22-4	86.09%	Die attach epoxy: Henkel (Ablebond) 2100A
			0.011%	0.00012	2,2-dimethyl-1,3 Propanediyl Bismethacrylate	1985-51-9	5.92%	
			0.011%	0.00012	A mixture of: 4-allyl-2,6-bis(2,3-epoxypropyl)phenol	-	5.92%	
			0.004%	0.00004	2-[[2,2 bis[[1-(oxoallyloxy)methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate	94108-97-1	1.88%	
			0.0004%	0.000004	bis(4-tert-butylcyclohexyl) peroxydicarbonate	15520-11-3	0.19%	
Wire	0.290%	0.0031	0.285%	0.00306	Copper	7440-50-8	98.45%	0.8 mil diameter; 1 wire per solder ball
			0.004%	0.00005	Palladium	7440-05-3	1.55%	
Solder Balls	22.649%	0.2426	21.86%	0.2341	Tin (Sn)	7440-31-5	96.50%	SAC305
			0.68%	0.0073	Silver (Ag)	7440-22-4	3.00%	
			0.11%	0.0012	Copper (Cu)	7440-50-8	0.50%	
Substrate	24.471%	0.2621	7.83%	0.0839	BT Resins	-	32.00%	BT Resin CCL-HL832NX-A
			16.64%	0.1782	Glass fiber	65997-17-3	68.00%	
Foil	16.966%	0.1817	15.42%	0.1651	Copper	7440-50-8	90.87%	
			1.47%	0.0157	Nickel plating	7440-02-0	8.64%	
			0.08%	0.0009	Gold plating	7440-57-5	0.48%	
Solder Mask	4.244%	0.0455	2.39%	0.0255	Quartz	14808-60-7	56.20%	Solder mask PSR4000 AUS 308
			0.68%	0.0073	3-methoxy-3-methylbutylacetate	103429-90-9	16.00%	
			0.93%	0.0100	Barium Sulfate	7727-43-7	22.00%	
			0.13%	0.0014	Talc	14807-96-6	3.00%	
			0.02%	0.0002	Naphthalene	91-20-3	0.50%	
			0.10%	0.0010	Trade secret ingredients	-	2.30%	

100.000% 1.071 100.000% 1.071

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