



Device Material Content

5555 NE Moore Ct. Hillsboro OR 97124 custreq@latticesemi.com					Package Code: FTN256		Assembly: ASEM Size (mm): 17 x 17 Lead pitch (mm): 1.0 MSL: 3 Reflow max (°C): 260	
Package: 256 ftBGA (option 2) Total Device Weight 1.234 Grams					Products: FE3			
June, 2022	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	1.22%	0.0151	1.22%	0.0151	Silicon chip	7440-21-3	100.00%	Die size: 4.64 x 5.16 mm
Mold Compound	37.10%	0.4578	2.60% 1.86% 1.86% 0.19% 30.61%	0.0320 0.0229 0.0229 0.0023 0.3777	Epoxy Resin Phenol Novolac Metal Hydroxide Carbon Black Silica Fused	- 9003-35-4 - 1333-86-4 60676-86-0	7.00% 5.00% 5.00% 0.50% 82.50%	Mold Compound: Sumitomo G750SE (ULA)
D/A Epoxy	0.17%	0.0021	0.14% 0.03%	0.00168 0.00042	Silver Esters & resins	7440-22-4 -	80.00% 20.00%	Die attach epoxy: Henkel (Ablebond) 2100A
Wire	0.33%	0.0041	0.33% 0.00%	0.0040 0.0001	Copper Palladium	7440-50-8 7440-05-3	98.50% 1.50%	0.8 mil diameter; 1 wire per solder ball
Solder Balls	20.18%	0.2490	19.47% 0.61% 0.10%	0.2403 0.0075 0.0012	Tin (Sn) Silver (Ag) Copper (Cu)	7440-31-5 7440-22-4 7440-50-8	96.50% 3.00% 0.50%	SAC305
Substrate	24.19%	0.2985	7.74% 16.45%	0.0955 0.2030	BT Resins Glass fiber	- 65997-17-3	32.00% 68.00%	BT Resin CCL-HL832NX-A
Foil	11.00%	0.1357	9.02% 1.66% 0.32%	0.1113 0.0205 0.0039	Copper Nickel Gold	7440-50-8 7440-02-0 7440-57-5	82.00% 15.10% 2.91%	
Solder Mask	5.81%	0.0717	3.27% 0.93% 1.28% 0.17% 0.16%	0.0403 0.0115 0.0158 0.0022 0.0020	Quartz 3-methoxy-3-methylbutylacetate Barium Sulfate Talc (containing no asbestiform fibers) Trade secret ingredients	14808-60-7 103429-90-9 7727-43-7 14807-96-6 -	56.20% 16.00% 22.00% 3.00% 2.80%	Solder mask PSR4000 AUS 308

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.

www.latticesemi.com





Device Material Content

5555 NE Moore Ct. Hillsboro OR 97124 custreq@latticesemi.com					Package Code: FTN256		Assembly: ASEK Size (mm): 17 x 17 Lead pitch (mm): 1.0 MSL: 3 Reflow max (°C): 260	
Package: 256 ftBGA (option 2) Total Device Weight 1.234 Grams					Products: FE3			
June, 2022	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	1.22%	0.0151	1.22%	0.0151	Silicon chip	7440-21-3	100.00%	Die size: 4.64 x 5.16 mm
Mold Compound	37.10%	0.4578	2.23% 1.86% 0.07% 31.61% 1.34%	0.0275 0.0229 0.0009 0.3901 0.0165	Epoxy Resin Phenol Resin Carbon Black Silica Others	- - 1333-86-4 60676-86-0 -	6.00% 5.00% 0.20% 85.20% 3.60%	Mold Compound: Kyocera KE-G2250 series (ULA)
D/A Epoxy	0.17%	0.0021	0.14% 0.03%	0.00168 0.00042	Silver Esters & resins	7440-22-4 -	80.00% 20.00%	Die attach epoxy: Henkel (Ablebond) 2100A
Wire	0.33%	0.0041	0.33% 0.00%	0.0040 0.0001	Copper Palladium	7440-50-8 7440-05-3	98.50% 1.50%	0.8 mil diameter; 1 wire per solder ball
Solder Balls	20.18%	0.2490	19.88% 0.20% 0.10%	0.2453 0.0025 0.0012	Tin (Sn) Silver (Ag) Copper (Cu)	7440-31-5 7440-22-4 7440-50-8	98.50% 1.00% 0.50%	SAC105
Substrate	24.19%	0.2985	7.74% 16.45%	0.0955 0.2030	BT Resins Glass fiber	- 65997-17-3	32.00% 68.00%	BT Resin CCL-HL832NX-A
Foil	11.00%	0.1357	9.02% 1.66% 0.32%	0.1113 0.0205 0.0039	Copper Nickel Gold	7440-50-8 7440-02-0 7440-57-5	82.00% 15.10% 2.91%	
Solder Mask	5.81%	0.0717	3.27% 0.93% 1.28% 0.17% 0.16%	0.0403 0.0115 0.0158 0.0022 0.0020	Quartz 3-methoxy-3-methylbutylacetate Barium Sulfate Talc (containing no asbestiform fibers) Trade secret ingredients	14808-60-7 103429-90-9 7727-43-7 14807-96-6 -	56.20% 16.00% 22.00% 3.00% 2.80%	Solder mask PSR4000 AUS 308

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.

www.latticesemi.com

