Device Material Content

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Package: 324 ftBGA
Total Device Weight 1.14 Grams

Package Code: FTN324
Products: LA-MXO

Assembly: ASEM
Size (mm): 19 x 19
Lead pitch (mm): 1.0
MSL: 3
Reflow max (^{o}C): 260

	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	0.87%	0.0099	0.87%	0.0099	Silicon chip	7440-21-3	100.00%	Die size: 4.08 x 3.85 mm
Mold Compound	45.91%	0.5233	40.40%	0.4605	Silica Fused	60676-86-0	88.00%	Mold Compound: Sumitomo G770
			2.30%	0.0262	Epoxy Resin	-	5.00%	
			2.30%	0.0262	Phenol Resin	-	5.00%	
			0.80%	0.0092	Metal Hydroxide	-	1.75%	
			0.11%	0.0013	Carbon Black	1333-86-4	0.25%	
D/A Epoxy	0.14%	0.0016	0.11%	0.00128	Silver	7440-22-4	80.00%	Die attach epoxy: Henkel (Ablebond) 2100A
			0.03%	0.00032	Esters & resins	-	20.00%	
Wire	0.83%	0.0095	0.82%	0.0093	Gold (Au)	7440-57-5	98.50%	0.8 mil diameter; 1 wire per solder ball
Solder Balls	29.04%	0.3311	28.03%	0.3195	Tin (Sn)	7440-31-5	96.50%	SAC305
			0.87%	0.0099	Silver (Ag)	7440-22-4	3.00%	
			0.15%	0.0017	Copper (Cu)	7440-50-8	0.50%	
Substrate	13.69%	0.1560	4.38%	0.0499	BT Resins	-	32.00%	BT Resin CCL-HL832NX-A*
			9.31%	0.1061	Glass fiber	65997-17-3	68.00%	
Foil	6.22%	0.0710	5.10%	0.0582	Copper	7440-50-8	82.00%	
			0.94%	0.0107	Nickel plating	7440-02-0	15.10%	
			0.18%	0.0021	Gold plating	7440-57-5	2.91%	
Solder Mask	3.29%	0.0375	1.79%	0.0204	Quartz	14808-60-7	54.37%	Solder mask PSR4000 AUS 308
			0.24%	0.0027	Dipropylene glycol monomethyl ether	34590-94-8	7.33%	
			0.11%	0.0012	Morpholine derivative	71868-10-5	3.32%	
			0.10%	0.0011	Silicon dioxide	7631-86-9	3.00%	
			0.10%	0.0011	Silica, amorphous	112945-52-5	3.00%	
			0.01%	0.0001	Carbon black	1333-86-4	0.24%	
			0.94%	0.0108	Trade secret ingredients	-	28.74%	

Notes: * 0.14% max. concentration (of total pkg wt.) of Bisphenol A (CAS# 80-05-7), contained in substrate laminate material as impurity - not intentionally added.

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