



Device Material Content

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Assembly: ASET
Size (mm): 17 x 17

Package Code:

208 ftBGA FTG208

Lead pitch (mm): 1.0

Package: 208 ftBGA
Total Device Weight 0.750 Grams

Products:

MSL: 3

August, 2019

LPTM10

Reflow max (°C): 260

	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	1.48%	0.0111	1.48%	0.0111	Silicon chip	7440-21-3	100.00%	Die size: 3.25 x 3.25 mm + 2.65 x 2.65 mm Side-by-side (dual-die)
Mold Compound	54.91%	0.4118	48.05%	0.3604	Silica	60676-86-0	87.50%	Mold Compound: Kyocera G2250LKDS series (ULA)
			3.57%	0.0268	Epoxy resin	-	6.50%	
			3.02%	0.0227	Phenol Resin	-	5.50%	
			0.27%	0.0021	Carbon Black	1333-86-4	0.50%	
D/A Epoxy	0.24%	0.0018	0.19%	0.00143	Silver	7440-22-4	80.00%	Die attach epoxy: Henkel (Ablebond) 2100A
			0.05%	0.00036	Esters & resins	-	20.00%	
Wire	0.40%	0.0030	0.39%	0.0029	Gold (Au)	7440-57-5	98.50%	0.7 mil diameter; 1 wire per solder ball
Solder Balls	13.46%	0.1009	12.99%	0.0974	Tin (Sn)	7440-31-5	96.50%	SAC305
			0.40%	0.0030	Silver (Ag)	7440-22-4	3.00%	
			0.07%	0.0005	Copper (Cu)	7440-50-8	0.50%	
Substrate	17.42%	0.1306	5.57%	0.0418	BT Resins	-	32.00%	BT Resin CCL-HL832NX-A*
			11.84%	0.0888	Glass fiber	65997-17-3	68.00%	
Foil	7.92%	0.0594	6.49%	0.0487	Copper	7440-50-8	82.00%	
			1.20%	0.0090	Nickel plating	7440-02-0	15.10%	
			0.23%	0.0017	Gold plating	7440-57-5	2.91%	
Solder Mask	4.18%	0.0314	2.27%	0.0171	Quartz	14808-60-7	54.37%	Solder mask PSR4000 AUS 308
			0.31%	0.0023	Dipropylene glycol monomethyl ether	34590-94-8	7.33%	
			0.14%	0.0010	Morpholine derivative	71868-10-5	3.32%	
			0.13%	0.0009	Silicon dioxide	7631-86-9	3.00%	
			0.13%	0.0009	Silica, amorphous	112945-52-5	3.00%	
			0.01%	0.0001	Carbon black	1333-86-4	0.24%	
			1.20%	0.0090	Trade secret ingredients	-	28.74%	

Notes: * 0.17% 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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