



## Device Material Content

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**Package:** 256 ftBGA  
**Total Device Weight** 0.705 Grams

**Package Code:**  
FTN256 (v.1)

**Products:**

LA-XP2, LAMXO

**Assembly:** ASEM  
Size (mm): 17 x 17

Lead pitch (mm): 1.0

MSL: 3

Reflow max (°C): 260

October, 2019

	% of Total Pkg. Wt.	Weight (g)	% of Total Pkg. Wt.	Weight (g)	Substance	CAS #	% of Subst.	Notes / Assumptions:
<b>Die</b>	1.00%	0.0071			Silicon chip	7440-21-3	100.00%	Die size: 3.35 x 3.35 mm
<b>Mold Compound</b>	55.31%	0.390	2.77%	0.0195	Epoxy Resin	-	5.00%	Mold Compound: Hitachi CEL9750ZHF10AKL-U (ULA)
			2.77%	0.0195	Phenol Resin	-	5.00%	
			0.11%	0.0008	Carbon Black	1333-86-4	0.20%	
			48.56%	0.3424	Silica	60676-86-0	87.80%	
			1.11%	0.0078	Others	-	2.00%	
<b>D/A Epoxy</b>	0.16%	0.0011	0.13%	0.00088	Silver (Ag)	7440-22-4	80.00%	Die attach epoxy: Henkel (Ablebond) 2100A
			0.03%	0.00022	Organic esters and resins	-	20.00%	
<b>Wire</b>	1.07%	0.0075	1.07%	0.0075	Gold (Au)	7440-57-5	100.00%	0.8 to 1.0 mil diameter; 1 wire per package lead
<b>Solder Balls</b>	13.78%	0.097	13.30%	0.0937	Tin (Sn)	7440-31-5	96.50%	SAC305
			0.41%	0.0029	Silver (Ag)	7440-22-4	3.00%	
			0.07%	0.0005	Copper (Cu)	7440-50-8	0.50%	
<b>Substrate</b>	13.11%	0.0924	4.20%	0.0296	BT Resins	-	32.00%	BT Resin CCL-HL832NX-A
			8.91%	0.0628	Glass fiber	65997-17-3	68.00%	
<b>Foil</b>	9.56%	0.0674	8.14%	0.0574	Copper	7440-50-8	85.15%	
			1.87%	0.0096	Nickel plating	7440-02-0	14.28%	
			0.07%	0.0004	Gold plating	7440-57-5	0.57%	
<b>Solder Mask</b>	6.01%	0.0424	3.27%	0.02303	Quartz	14808-60-7	54.37%	Solder mask PSR4000 AUS 308
			0.44%	0.00310	Dipropylene glycol monomethyl ether	34590-94-8	7.33%	
			0.20%	0.00141	Morpholine derivative	71868-10-5	3.32%	
			0.18%	0.00127	Silicon dioxide	7631-86-9	3.00%	
			0.18%	0.00127	Silica, amorphous	112945-52-5	3.00%	
			0.01%	0.00010	Carbon black	1333-86-4	0.24%	
			1.73%	0.01217	Trade secret ingredients	-	28.74%	

**Notes:** \* 0.13% max. concentration of Bisphenol A (CAS# 80-05-7) in substrate laminate material as impurity - not intentionally added.

The values listed above are nominal values based on studies of representatives of this particular package type, and are believed to be as accurate as possible.

Constituent substances and proportions in epoxy materials are before curing.

The information provided above is representative of the package as of the date listed, and is subject to change at any time.

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PCN#06A-17  
Rev. E1