



## Device Material Content

5555 NE Moore Ct. Hillsboro OR 97124 <a href="mailto:custreq@latticesemi.com">custreq@latticesemi.com</a>  May, 2021				Package: 72 QFN <b>Total Device Weight 228.0 Milligrams</b>		Package Code: <b>SG72</b> Products: XO3D		Assembly: ASEK Size (mm): 10 x 10 x 0.65 Lead pitch (mm): 0.5 MSL: 3 Reflow max (°C): 260	
	% of Total Pkg. Wt.	Weight (mg)	% of Total Pkg. Wt.	Weight (mg)	Substance	CAS #	% of Subst.	Notes / Assumptions:	
<b>Die</b>	6.80%	15.50	6.80%	15.500	Silicon chip	7440-21-3	100.00%	Die size: 3.35 x 3.35 mm	
<b>Mold Compound</b>	46.18%	105.30	3.69%	8.424	Epoxy Resin	-	8.00%	Mold Compound: Sumitomo EME-G631SB (ULA)	
			3.69%	8.424	Phenol Resin	-	8.00%		
			32.33%	73.710	Silica(Amorphous) A	60676-86-0	70.00%		
			4.62%	10.530	Silica(Amorphous) B	7631-86-9	10.00%		
			1.39%	3.159	Metal Hydroxide	-	3.00%		
			0.46%	1.053	Carbon black	1333-86-4	1.00%		
<b>Die attach</b>	2.54%	5.80	0.18%	0.406	Acrylic Resin	-	7.00%	Die attach: Hitachi EN-4900F	
			0.31%	0.696	Polybutadiene derivative	-	12.00%		
			0.01%	0.029	Butadiene copolymer	-	0.50%		
			0.18%	0.406	2-Phenoxyethyl Acrylate	48145-04-6	7.00%		
			0.01%	0.029	Peroxide	-	0.50%		
			0.04%	0.087	Additive	-	1.50%		
			1.82%	4.147	Silver	7440-22-4	71.50%		
<b>Wire</b>	0.26%	0.60	0.26%	0.582	Copper (Cu)	7440-50-8	97.00%	0.8 mil wire diameter	
			0.01%	0.015	Palladium (Pd)	7440-05-3	2.50%		
			0.00%	0.003	Gold (Au)	7440-57-5	0.50%		
<b>Plating</b>	0.35%	0.80	0.35%	0.798	Tin (Sn)	7440-31-5	100.00%	Plating is 100% Matte Sn; thickness is >10.2µm	
<b>Leadframe</b>	43.86%	100.00	42.67%	97.290	Copper (Cu)	7440-50-8	97.29%	C194	
			0.04%	0.080	Phosphorus (P)	7723-14-0	0.08%		
			0.06%	0.130	Zinc Oxide	7440-66-6	0.13%		
			1.03%	2.350	Iron (Fe)	7439-89-6	2.35%		
			0.04%	0.100	Silver (Ag)	7440-22-4	0.10%		
			0.02%	0.050	Conducting salt	-	0.05%		

**Notes:**  
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