



## Device Material Content

5555 NE Moore Ct. Hillsboro OR 97124 <a href="mailto:custreq@latticesemi.com">custreq@latticesemi.com</a>		<b>Package:</b> 256 csfBGA <b>Total Device Weight:</b> 457.0 Milligrams			<b>Package Code:</b> <span style="border: 1px solid black; padding: 2px;">CBG256</span>	Assembly: ASEK Size (mm): 14 x 14 Lead pitch (mm): 0.8 MSL: 3 Reflow max (°C): 260		
April, 2022					<b>Products:</b> LFCPNX (CertusPro-NX)			
	% of Total Pkg. Wt.	Weight (mg)	% of Total Pkg. Wt.	Weight (mg)	Substance	CAS #	% of Subst.	Notes / Assumptions:
Die	6.02%	27.529	6.02%	27.529	Silicon chip	7440-21-3	100.00%	Die size: 8.216 x 7.190mm
Repassivation Polyimide	0.10%	0.446	0.020% 0.000% 0.078%	0.089 0.002 0.355	Proprietary Monomer Methanol Non regulated ingredients	- 67-56-1 -	20.00% 0.50% 79.50%	HD4000E
RDL	0.62%	2.849	0.017% 0.62%	0.076 2.849	Titanium (Ti) Copper (Cu)	7440-32-6 7440-50-8	4.98% 100.00%	
UBM	0.33%	1.517	0.017% 0.167%	0.076 0.761	Titanium (Ti) Copper (Cu)	7440-32-6 7440-50-8	4.98% 50.18%	
Bump	0.86%	3.909	0.419% 0.008% 0.034% 0.395%	1.917 0.035 0.154 1.803	Tin (Sn) Silver (Ag) Copper (Cu) Nickel (Ni)	7440-31-5 7440-22-4 7440-50-8 7440-02-0	49.04% 0.90% 3.94% 46.12%	
Substrate	30.00%	137.078	14.34% 4.71% 7.05% 0.60%	65.523 21.521 32.213 2.742	Bismaleimide Resin Glass Fibers Copper (Cu) OSP	- - 7440-50-8 -	47.80% 15.70% 23.50% 2.00%	CCL-HL 832NS
Solder Mask	1.02%	4.641	0.239% 0.388% 0.149% 0.149% 0.090%	1.091 1.773 0.682 0.682 0.412	Solvent naphtha (petroleum) Phosphinnoxide derivative Talc (containing no asbestiform fibers) Epoxy Resin Barium Sulfate	64742-94-5 - 14807-96-6 85954-11-6 7727-43-7	23.52% 38.20% 14.70% 14.70% 8.88%	PFR800 AUS320
Mold Compound	33.68%	153.919	3.03% 2.02% 21.71% 6.74% 0.19%	13.853 9.235 99.201 30.784 0.847	Epoxy Resin Phenol Resin Silica(Amorphous) A Silica(Amorphous) B Carbon Black	- - 60676-86-0 7631-86-9 1333-86-4	9.00% 6.00% 64.45% 20.00% 0.55%	Sumitomo EME-G311SAC
Solder Balls	27.38%	125.111	26.418% 0.821% 0.137%	120.732 3.753 0.626	Tin (Sn) Silver (Ag) Copper (Cu)	7440-31-5 7440-22-4 7440-50-8	96.50% 3.00% 0.50%	SAC305

**Notes:**

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