

## **Device Material Content**

Assembly: ASEM 5555 NE Moore Ct. Hillsboro OR 97124 Package Code: Size (mm): 31 x 31 900 fpBGA FN900 custreq@lscc.com Lead pitch (mm): 1.0 Package: **Total Device Weight** 4.10 Grams **Products:** MSL: 3 April, 2018 LFSC Reflow max (°C): 250 % of Total % of Total Weight (g) Weight (g) Substance CAS# % of Subst. Notes / Assumptions: Pkg. Wt. Pkg. Wt. Die size: 9.49 x 9.80 mm Die 1.64% 0.0672 1.64% 0.0672 Silicon chip 7440-21-3 100.00% Mold Compound 41.74% 1.7113 Mold Compound: Hitachi CEL9750ZHF10AKL-U (ULA) 2.09% 0.0856 Epoxy Resin 5.00% 2.09% 0.0856 Phenol Resin 5.00% 0.08% 0.0034 Carbon Black 1333-86-4 0.20% 36.65% 1.5026 Silica 60676-86-0 87.80% 0.0342 Others 2.00% 0.83% 0.0094 D/A Epoxy 0.23% Die attach epoxy: Henkel (Ablebond) 2100A 7440-22-4 80.00% 0.18% 0.00756 Silver 0.05% 0.00189 Esters & resins 20.00% Wire 0.64% 0.0264 0.8 mil diameter; 1 wire per solder ball 0.63% 0.0260 Gold (Au) 7440-57-5 98.50% Solder Balls 0.8945 SAC305 21.82% 21.05% Tin (Sn) 7440-31-5 96.50% 0.8632 0.65% Silver (Ag) 7440-22-4 3.00% 0.0268 0.11% 0.0045 Copper (Cu) 7440-50-8 0.50% Substrate 33.92% 1.3907 BT Resin CCL-HL832NX-A 20.01% 0.8205 Laminate\* 59.00% 4.81% 0.1971 Solder mask PSR4000 AUS 308 14.17% 0.3060 7440-50-8 22.00% 7.46% Copper 1.37% 0.0563 Nickel plating 7440-02-0 4.05% 0.26% 0.0108 Gold plating 7440-57-5 0.78%

Notes:

0.20% 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.

www.latticesemi.com







PCN#05A-17 Rev. D1