

5555 NE Moore Ct. Hillsboro OR 97124 custreq@latticesemi.com April , 2025	Package: 676 feBGA Total Device Weight 3562.7 milligram		Package Code: LFG676 Products: LAV-AT-E70		Assembly: ASEK Size (mm): 27x27x2.787 Lead pitch (mm): 1 MSL: 4 Reflow max (°C): 245°C			
	% of Total Pkg. Wt.	Weight (mg)	% of Total Pkg. Wt.	Weight (mg)	Substance	CAS #	% of Subst.	Notes / Assumptions:
	Die	20.305%	723.4093	20.305%	723.409	Silicon chip	7440-21-3	100.000%
Solder paste	0.052%	1.8370	0.049% 0.002% 0.001%	1.750 0.056 0.032	Tin Silver Copper	7440-31-5 7440-22-4 7440-50-8	95.238% 3.025% 1.737%	M705-515A(8)C1-T6H
Capacitor	0.185%	6.6000	0.074% 0.037% 0.012% 0.038% 0.001% 0.003% 0.004% 0.004% 0.011%	2.640 1.320 0.440 1.368 0.030 0.122 0.140 0.160 0.380	Barium oxide, obtained by calcining witherite Titanium dioxide Misc Copper (Cu); Copper (metallic) Diboron trioxide; Boric oxide Silicon dioxide Nickel - Plated Layer Nickel - Inner electrode Tin - Plated Layer	1304-28-5 13463-67-7 - 7440-50-8 1303-86-2 7631-86-9 7440-02-0 7440-02-0 7440-31-5	40.000% 20.000% 6.667% 20.730% 0.461% 1.842% 2.120% 2.420% 5.760%	0.33mg per capacitor Total : 28 pcs
Underfill	0.589%	21.0000	0.085% 0.057% 0.031% 0.057% 0.003% 0.342% 0.014%	3.043 2.029 1.116 2.029 0.101 12.174 0.507	1,6-Bis(2,3-epoxypropoxy)naphthalene Bisphenol F type liquid epoxy resin Bisphenol A type liquid epoxy resin Amine type hardener Carbon black Silicon dioxide Additives	27610-48-6 9003-36-5 25068-38-6 trade secret 1333-86-4 60676-86-0 trade secret	14.493% 9.662% 5.314% 9.662% 0.483% 57.971% 2.415%	UA-28
Solder ball	15.859%	565.000000	15.296% 0.476% 0.079% 0.008%	544.943 16.950 2.825 0.283	Tin Silver Copper Nickel	7440-31-5 7440-22-4 7440-50-8 7440-02-0	96.45% 3.00% 0.50% 0.05%	Solder Ball(96.45Sn/3.0Ag/0.5Cu/0.05Ni)_0.6mm
BT-substrate Plating Cu Plating Au Plating Pd Plating Ni	63.010%	2244.830000	19.894% 0.004% 0.002% 0.194%	708.743 0.150 0.062 6.902	Plating Cu Plating Au Plating Pd Plating Ni	7440-50-8 7440-57-5 7440-50-3 7440-02-0	31.572% 0.007% 0.003% 0.307%	
Solder Ball Sn3Ag0.5Cu			0.035% 0.001% 0.000%	1.250 0.039 0.006	Tin Silver Copper	7440-31-5 7440-22-4 7440-50-8	0.056% 0.002% 0.000%	Sn3Ag0.5Cu
Core _ MCLE705G			3.600% 9.834% 9.834% 9.834%	128.267 350.343 350.343 350.343	copper Glass Cloth Silica Vitreous Thermosetting(Resin and other filler)	7440-50-8 65997-17-3 60676-86-0 Trade secret	5.714% 15.607% 15.607% 15.607%	MCLE705G
ABF (GX92R)			0.661% 0.661% 0.132% 0.053% 0.013% 0.013% 0.004% 0.004% 3.483% 3.792%	23.563 23.563 4.713 1.885 0.471 0.471 0.157 0.157 124.098 135.094	Bisphenol A epoxy resin Bisphenol F epoxy resin Coal tar naphtha Cyclohexanone Toluene Methyl ethyl ketone Naphthalene Trimethylbenzene Silicon dioxide Others	25068-38-6 9003-36-5 64742-94-5 108-94-1 108-88-3 78-93-3 91-20-3 25551-13-7 7631-86-9 Trade Secret	1.050% 1.050% 0.210% 0.084% 0.021% 0.021% 0.007% 0.007% 5.528% 6.018%	GX92R
Solder Mask (SR-F)			0.029% 0.019% 0.202% 0.096% 0.029% 0.029% 0.009% 0.009% 0.005% 0.005% 0.005% 0.005% 0.005% 0.480% 0.052%	1.026 0.684 7.184 3.421 1.026 1.026 0.017 0.017 0.171 0.171 0.171 0.171 17.105 1.847	Phenol, polymer with (chloromethyl)oxirane and formaldehyde Phenylbis (2, 4, 6-trimethylbenzoyl) phosphine oxide Sulfuric acid, barium salt (1:1) Silica, vitreous 2-Propenoic acid, 2-[[[3-hydroxy-2, 2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1, 3-propanediyl 2H-Benzimidazole-2-thione, 1, 3-dihydro- Naphthalene 2, 6-Di-tert-butyl-4-methylphenol Acetamide, N, N-dimethyl- Ethanol, 2- (2-ethoxyethoxy)-, acetate Solvent naphtha (Petroleum), heavy aromatic Cyclohexanone 2-Butanone Resin Additive	9003-36-5 162881-26-7 7727-43-7 60676-86-0 60506-81-2 583-39-1 91-20-3 128-37-0 127-19-5 112-15-2 64742-94-5 108-94-1 78-93-3 Trade secret Trade secret	0.046% 0.030% 0.320% 0.152% 0.046% 0.046% 0.001% 0.001% 0.008% 0.008% 0.008% 0.008% 0.762% 0.082%	SR-F

Notes:

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