

pSEMI MATERIAL DECLARATION FORM

Product:	PE42444
Ordering Codes:	PE42444A-Z
Description:	5G mMIMO AAS SP4T
Package:	20L 4x4 LGA
Environmental Compliance	EU RoHS Directive 2011/65/EC and amendment 2015/863, REACH - EU ECHA SVHC, Arsenic Free, JIG 101 - EIA/EICTA/JEITA, Halogen Free - IEC61249-2-21, PFOS Free - 2006/122/EC, Antimony Trioxide Free
Lead Finish	NiPdAu
Availability	Now

Component	Material	CAS Number	Weight (mg)	%	PPM
Die	Silicon	7440-21-3	7.255174	14.65%	146,496.86
Die	Phosphorus	7723-14-0	0.000037	0.00%	0.74
Die	Boron	7440-42-8	0.000037	0.00%	0.74
Die	Arsenic	7440-38-2	0.000037	0.00%	0.74
Die	Germanium	7440-56-4	0.000037	0.00%	0.74
Die	Indium	7440-74-6	0.000037	0.00%	0.74
Die	Cobalt	7440-48-4	0.000037	0.00%	0.74
Die	Tungsten	7440-33-7	0.001365	0.00%	27.57
Die	Copper	7440-50-8	0.041403	0.08%	836.02
Die	Tantalum	7440-25-7	0.001964	0.00%	39.66
Die	Aluminum	7429-90-5	0.000759	0.00%	15.33
Polyimide	Proprietary	Trade secret	0.000034	0.00%	0.69
UBM	Copper	7440-50-8	0.000354	0.00%	7.15
UBM	Titanium	7440-32-6	0.000177	0.00%	3.58
Pillar - Solder Cap	Tin	7440-31-5	0.024737	0.05%	499.48
Pillar - Solder Cap	Silver	7440-22-4	0.000453	0.00%	9.16
Pillar - Cu	Copper	7440-50-8	0.004781	0.01%	96.55
Pillar - Ni Barrier	Nickel	7440-02-0	0.000023	0.00%	0.45
Substrate	Copper	7440-50-8	3.09202686	6.24%	62,434.37
Substrate	Nickel	7440-02-0	0.190790724	0.39%	3,852.46
Substrate	Palladium	7440-05-3	0.008589155	0.02%	173.43
Substrate	Gold	7440-57-5	0.006902766	0.01%	139.38
Substrate	Continuous Filament Fiber Glass	65997-17-3	4.3264	8.74%	87,358.90
Substrate	Thermosetting resin	Trade secret	3.9936	8.06%	80,638.99
Substrate	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	0.044187741	0.09%	892.24
Substrate	Solvent naphtha(petroleum)	64742-94-5	0.044187741	0.09%	892.24
Substrate	Talc(containing no asbestos fibers)	14807-96-6	0.044187741	0.09%	892.24
Substrate	1,3,5-Triazine-2,4,6-Triamine	108-78-1	0.011046935	0.02%	223.06
Substrate	Formaldehyde, polymer with (chloromethyl)oxirane and phenol	9003-36-5	0.165704029	0.33%	3,345.90
Substrate	2-[[3-[(1-Oxoallyl)oxy]-2,2-bis[[[(1-oxoallyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl]diacrylate	29570-58-9	0.088375482	0.18%	1,784.48
Substrate	2-[[3-Hydroxy-2,2-bis[[[(1-oxoallyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl]diacrylate	60506-81-2	0.044187741	0.09%	892.24
Mold Compound	Solid Epoxy Resin	Trade secret	3.01328	6.08%	60,844.31
Mold Compound	Phenol Resin	Trade secret	2.109296	4.26%	42,591.02
Mold Compound	Carbon Black	1333-86-4	0.301328	0.61%	6,084.43
Mold Compound	Metal Hydroxide	Trade secret	0.903984	1.83%	18,253.29

Mold Compound	Amorphous silica	60676-86-0	22.900928	46.24%	462,416.78
Mold Compound	Crystalline silica	14808-60-7	0.903984	1.83%	18,253.29
Total Weight (mg)			49.524431	100.00%	1,000,000