

MSMB Material Declaration Sheet

Item No.	Component	Material Name	Component Mass [g]	Sub Component Breakdown	CAS No.	Sub Component Mass [g]	Sub Component Mass per Unit[%]	Sub Component Mass per Component [%]
1	Lead Frame	Bare Cu	0.032301	Copper (Cu)	7440-50-8	0.032236398	31.33%	99.80%
				Iron (Fe)	7439-89-6	0.000030363	0.03%	0.09%
				Phosphorus (P)	7723-14-0	0.000010013	0.01%	0.03%
				Others	NA	0.000024226	0.02%	0.08%
2	Solder	Solder Paste	0.0033	Lead (Pb)	7439-92-1	0.00303798	2.95%	92.06%
				Tin (Sn)	7440-31-5	0.00017358	0.17%	5.26%
				Silver (Ag)	7440-22-4	0.00008844	0.09%	2.68%
3	Die	Silicon Chip	0.002565	Silicon (Si)	7440-21-3	0.002565	2.49%	100.0%
4	Encapsulation	Epoxy Molding Compound	0.063887	Fused Silica (SiO2)	14808-60-7	0.04983186	48.43%	78.0%
				Epoxit resin	29690-82-2	0.00766644	7.45%	12.0%
				Phenolic resin	9003-35-4	0.004024881	3.91%	6.3%
				Carbon Black	1333-86-4	0.000511096	0.50%	0.8%
				Metal Hydroxide	Confidential	0.001852723	1.80%	2.9%
5 A	Plating (e3)	Pure Tin Plating	0.000837	Tin (Sn)	7440-31-5	0.000837	0.81%	100.00%
5 B	Plating (PbSn)	Tin/Lead plating	0.000837	Tin (Sn)	7440-31-5	0.0007533	0.73%	90.00%
				Lead (Pb)	7439-92-1	0.0000837	0.08%	10.00%
Total Mass os Assembled Unit [g]			0.1029			0.1029	100%	

