

Package Weight and Material Composition

Rev JA

Customer : Nordric / nRF9E5

Date: 8/19/2011

Prepared by : Ly-anne Marcelo

Package: MLF 5x5x0.85 32lds

Pad/cavity size: 3.500 x 3.500 mm

	Name	Composition	%	gms	Density	gms	%	PPM
Molding Compound	Sumitomo EME G700 (Green)				1.95	0.02420	35.78%	357,773
	Resin Type	Multi-aromatic Resin %	16.0	0.003872			5.72%	57,244
	Filler Type	SiO2 Filler %	84.0	0.020329			30.05%	300,530
Frame	C194FH				8.9	0.03683	54.45%	544,466
		Cu	97.44	0.035888			53.05%	530,542
		Fe	2.35	0.000866			1.28%	12,795
		Zn	0.13	0.000046			0.07%	681
		P	0.08	0.000030			0.04%	449
Frame Plating	Ag				Avg. Density	0.00032	0.47%	4,731
		Ag		0.000320	10.50		0.47%	4,731
Die						0.00368	5.43%	54,328
Die #1	Silicon			0.003675	2.4		5.433%	54,328
Die Attach	CRM 1085A					0.00105	1.55%	15,465
		Resin	16	0.000167	4.5		0.25%	2,474
		Ag	84	0.000879			1.30%	12,991
Wire	Wire Dia(mm)	0.020				0.00030	0.45%	4,493
			Cu	99.9900	0.000304		0.449%	4,493
			Ca	0.0020	0.000000		0.000%	0,090
			Ni	0.0015	0.000000		0.000%	0,067
			S	0.0012	0.000000		0.000%	0,054
			Fe	0.0010	0.000000		0.000%	0,045
			Al	0.0010	0.000000		0.000%	0,045
			Others	0.0003	0.000000		0.000%	0,013
External Plating	Sn	Sn			Avg. Density	0.00127	1.87%	18,742
			Sn		0.001268	7.30	1.874%	18,742
							0.068	100.00%



Shaded blocks calculated per RoHS requirements

Disclaimer

The calculators identified in this report are used solely for determining package and weight composition and not for any other purpose, including but not limited to RoHS compliance. These calculators are used at the request of Customer in accordance with Amkor's current Terms and Conditions. Customer acknowledges that certain data used to generate the package and weight composition are provided by third parties and may not be validated and as such, the associated calculations performed herein are unproven and may produce inconclusive results.

All information generated by the use of these calculators is provided "As Is." Amkor makes no warranty or representation, whatsoever, as to the sufficiency or accuracy of any such information it has disclosed hereunder or as to the results to be obtained therefrom and assumes no responsibility arising from any use or misuse thereof.