



Material Declaration

Device: GRF2073

RoHs Compliant: Yes

Conflict Mineral Check: Yes

No.	Part Name	Material Name	Component Wt. (mg)	Material Content (Element)	CAS Number	Element Wt (%)	Element Wt (mg)	Wt % Of Total Unit Wt	PPM
1	Leadframe	Copper Alloy	3.431	Cu	7440-50-8	97.52	3.35	29.51%	295052.51
				Fe	7439-89-6	2.3	0.08	0.70%	6958.79
				Zn	7440-66-6	0.15	0.01	0.05%	453.83
				P	7723-14-0	0.03	0.00	0.01%	90.77
2	Die Attach Material	Conductive Paste	0.025	Silver	7440-22-4	80	0.02	0.18%	1773.12
				Resin Epoxy A	9003-36-5	10	0.00	0.02%	221.64
				Resin Epoxy B	Trade Secret	7	0.00	0.02%	155.15
				Phenol Resin	Trade Secret	2	0.00	0.00%	44.33
				Dicyandiamide	461-58-5	1	0.00	0.00%	22.16
3	Gold Wire	Gold	0.021	Au	7440-57-5	99.99	0.02	0.18%	1846.81
				Other	Proprietary	0.01	0.00	0.00%	0.18
4	Internal Plating	NiPdAu	0.013	Ni	7440-02-0	92.23	0.01	0.11%	1078.87
				Pd	7440-05-3	7.47	0.00	0.01%	87.38
				Au	7440-57-5	0.3	0.00	0.00%	3.51
5	External Plating	NiPdAu	0.018	Ni	7440-02-0	92.23	0.02	0.14%	1427.68
				Pd	7440-05-3	7.47	0.00	0.01%	115.63
				Au	7440-57-5	0.3	0.00	0.00%	4.64
6	Mold Compound	Filled Epoxy	7.710	Epoxy A	Trade Secret	3	0.23	2.03%	20344.42
				Epoxy B	Trade Secret	3	0.23	2.03%	20344.42
				Phenol Resin	Trade Secret	3	0.23	2.03%	20344.42
				Silica (Amorphous) A	60676-86-0	75	5.78	50.86%	508610.53
				Silica (Amorphous) B	7631-86-9	15	1.16	10.17%	101722.11
				Metal Hydroxide	Trade Secret	0.5	0.04	0.34%	3390.74
				Carbon Black	1333-86-4	0.5	0.04	0.34%	3390.74
7	Die 1	GaAs Die	0.152	GaAs	1303-00-0	100	0.15	1.33%	13333.57
Total Weight =			11.370						

- Note:
- (A) Element Wt. Composition is derived from MSDS / Subcon Data
 - (B) Component Wt. may be based on assembly of generic parts
 - (C) Internal and External Plating weight is based on nominal plating thickness
 - (D) Guerrilla RF collaborates closely with our supply chain partners to make reasonable effort of working accuracy of data but in no terms guarantees the degree of accuracy of stated data.

More Info: <https://www.guerrilla-rf.com/environmental>

Questions: environmental@guerrilla-rf.com