



Date: November 1, 2018

Document: C

Rev: 2.0

Marking on device:

VS1X05GF
PPPPPPPPPP
FFFFFF YYWW

where, VS1X05GF = VS1205GF or VS1005GF

PPPPPPPPPP = Lot ID

FFFFFF = created from the Lot ID of the flash (top die)

YYWW = packaging year and week

Order code:
 VS1205G-F-Q
 VS1005G-F-Q

Product Name:
 VS1205G-F/LSR-ROHS
 VS1005G-F/LSR-ROHS

Package: QFN88 (10 x 10 x 0.75)

no	Part Name	Material Name	Component WT (mg)	Material Content (Element)	CAS#	Element Wt (%)	Element WT (mg)	WT% of total unit Wt	ppm
1	Die	Silicon Chip							
		1. (Bottom die, VS1X05G) - 204x205x8 mils	13.081	Silicon	7440-21-3	100.00	13.0810	5.750	57498.901
		2. (Top die, Flash memory) - 85 x 59 x 4 mils	0.794	Silicon	7440-21-3	100.00	0.7940	0.349	3490.110
2	Substrate (Lead Frame)	C194(FH)	82.720	Zinc	7440-66-6	0.105	0.0869	0.038	381.785
				Ferrous	7439-89-6	2.551	2.1102	0.928	9275.548
				Phosphorus	7723-14-0	0.147	0.1216	0.053	534.498
				Lead	7439-92-1	0.001	0.0007	0.000	3.272
				Nickel	7440-02-0	1.766	1.4608	0.642	6421.254
				Gold	7440-57-5	0.045	0.0372	0.016	163.622
				Silver	7440-22-4	0.025	0.0207	0.009	90.901
				Palladium	7440-05-3	0.060	0.0496	0.022	218.163
				Copper	7440-50-8	95.300	78.8322	34.651	346514.989
3	Mold Compound	EME G770HC	118.015	Epoxy Resin A	Trade Secret	4.00	4.7206	2.075	20749.890
				Epoxy Resin B	Trade Secret	0.50	0.5901	0.259	2593.736
				Phenol Resin A	Trade Secret	4.00	4.7206	2.075	20749.890
				Phenol Resin B	Trade Secret	0.50	0.5901	0.259	2593.736
				Silica(Amorphous) A	60676-86-0	83.00	97.9525	43.056	430560.220
				Silica(Amorphous) B	7631-86-9	7.50	8.8511	3.891	38906.044
				Carbon Black	1333-86-4	0.50	0.5901	0.259	2593.736
4	Bonding Wire	Gold Alloy (0.8 MIL)	2.110	Gold	7440-57-5	99.0480	2.0899	0.919	9186.430
				Palladium	7440-05-3	0.9500	0.0200	0.009	88.110
				Calcium	7440-70-2	0.0020	0.0000	0.000	0.185
5	Die Attach Material (Bottom die, VS1X05G)	AP4200	4.290	Silver	7440-22-4	76.50	3.2819	1.443	14425.714
				Formaldehyde, Polymer with (Chloromethyl)Oxirane and Phenol	9003-36-5	14.00	0.6006	0.264	2640.000
				4-Methyl-2-Phenyl-1H-Imidazole	827-43-0	3.00	0.1287	0.057	565.714
				Glycidoxypropyltrimethoxysilane	2530-83-8	0.50	0.0215	0.009	94.286
				Acetate	112-07-2	6.00	0.2574	0.113	1131.429
6	Die Attach Material (Top die, Flash memory)	IDU0C1-20E	0.110	Acryl copolymer	Trade Secret	62.00	0.0682	0.030	299.780
				Epoxy	29690-82-2	11.00	0.0121	0.005	53.187
				Hardener	Trade Secret	7.00	0.0077	0.003	33.846
				Silica	7631-86-9	20.00	0.0220	0.010	96.703
7	Plating (Solder)	Sn 100 %	6.380	Tin (Sn)	7440-31-5	100.00	6.3800	2.804	28043.956
Total Unit Weight =			227.500				227.500	100	1000000