

Fairchild Semiconductor Product Package Material Disclosure

Package Type	QSOP-20					
Weight of Package (grams)	Maximum	1.34E-01				
	Minimum	1.27E-01				
Component	Material	Weight in grams	Substance in material	Wt% in finished product min	Wt% in finished product max	CAS #
Lead Frame	Copper alloy	4.13E-02	Copper	30.67	32.57	
			Iron	29.88	31.56	7440-50-8
			Zinc	0.74	0.78	7439-89-6
			Phosphorus	0.04	0.04	7440-66-6
			Lead	0.01	0.01	7723-14-0
			Lead	0.01	0.01	7439-92-1
			Silver (DP)	0.00	0.16	7440-22-4
Encapsulation	Epoxy	8.27E-02	Silica	61.45	65.26	
			Carbon Black	38.01	50.68	
			Resin	0.00	0.95	
			Antimony Compound	9.50	21.86	1309-64-4
			Brominated Compound	0.32	1.90	
			Brominated Compound	0.95	2.53	40039-93-8 68541-56-0
Plating	Solder	3.70E-03	Tin	0.95	4.73	
			Lead	0.80	4.02	7440-31-5
	Lead	0.14	0.71	7439-92-1		
	or Lead-free Solder	3.70E-03	Tin	0.95	4.73	7440-31-5
			Tin	0.95	4.73	
Chip	Silicon and inorganic compounds	2.13E-03	Silicon and trace metals	1.55	1.72	
			Silicon and trace metals	1.55	1.72	7440-21-3
Die Attach	Adhesive	2.31E-04	Silver	0.17	0.19	
			Resin	0.13	0.14	7440-22-4
			Resin	0.04	0.05	
Wire Bond	Gold Wire	4.96E-04	Gold	0.36	0.40	
			Gold	0.36	0.40	7440-57-5



Materials Disclosure Disclaimer

The information provided in this Materials Disclosure is, to our knowledge, correct. However, there is no guarantee to completeness or accuracy, as some information is derived from data sources outside the company. Also, there may not be information included in this statement regarding the minute amounts of dopant and metal materials contained within the electrically active or passive devices contained within the finished product.