

Material Declaration Report

Package Type:	QSOP 20L
Pericom Package Code:	Q20(Pb-free)
RoHS Compliance:	Yes
Applicable Exemption:	N/A
REACH Compliance:	Yes
Halogen Free:	Yes

Component Weight (mg):	122.500
Termination Plating:	Matte Tin
JESD 97 Pb-free Category:	e3
Plating Thickness (um):	10~20
Tin Whisker Mitigation:	Anneal, 150C/1hr

MSL Rating:	1
Peak Body Temp (C):	260
Max Time (sec):	30
Reflow Cycles:	3
Rev Date:	6/28/2010

Homogeneous Material Declaration

MATERIAL ITEM	MATERIAL WEIGHT(mg)	ASSEMBLY SUBCON	MATERIAL COMPOSITION	CAS NO.	COMPOSITION %	COMPOSITION WEIGHT(mg)
MOLD COMPOUND	82.147		Silica Fused	60676-86-0	88.000	72.2893
			Epoxy Resin	Proprietary	5.000	4.1073
			Phenolic Resin	Proprietary	4.500	3.6966
			Epoxy, Cresol Novolac	29690-82-2	2.000	1.6429
			Carbon Black	1333-86-4	0.500	0.4107
LEADFRAME	36.460		Copper	7440-50-8	97.021	35.3735
			Iron	7439-89-6	2.350	0.8568
			Silver	7440-22-4	0.453	0.1653
			Zinc	7440-66-6	0.111	0.0404
			Phosphorus	7723-14-0	0.065	0.0237
SILICON DIE	1.790		Silicon (Si)	7440-21-3	99.192	1.7757
			Non-hazardous Metal	Proprietary	0.808	0.0145
DIE ATTACH EPOXY	0.262	UTL	Silver	7440-22-4	80.000	0.2098
			Functionalized Urethane	72869-86-4	8.000	0.0210
			Diester Resin	94-80-4	7.000	0.0184
			Epoxy Resin	Proprietary	5.000	0.0131
		SPEL	Silver	7440-22-4	80.000	0.2098
			Epoxy Resin	9003-36-5	10.000	0.0262
			Diluent	26447-14-3	6.000	0.0157
			Hardener	620-92-8	3.250	0.0085
			Dicyandamide	461-58-5	0.750	0.0020
GOLD WIRE	0.390		Gold(Au)	7440-57-5	99.990	0.3900
			Impurities	-	0.010	0.0000
SOLDER PLATING	1.451		Tin (Sn)	7440-31-5	99.990	1.4509
			Impurity	-	0.010	0.0001

NOTE: The device contents disclosed are approximated and are based on engineering estimates.

3rd Party Analysis Results (PPM)

MATERIAL	Pb	Hg	Cr+6	Cd	PBB	PBDE
Mold Compound	<2	<2	<2	<2	<5	<5
Leadframe	<50	<2	<2	<2	<5	<5
Silicon Die	<2	<2	<2	<2	<5	<5
Die Attach Epoxy	<2	<2	<2	<2	<5	<5
Gold Wire	<2	<2	<2	<2	<5	<5
Solder Plating	<50	<2	<2	<2	<5	<5

ROHS MATERIAL COMPOSITION DECLARATION

EU RoHS Directive 2002/95/EC and China RoHS Directive SJ/T11363-2006	Declaration Statement:	Quantity limit of 0.1% (1000 PPM) by mass in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium(Cr+6), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE); and Quantity limit of 0.01% (100 PPM) for Cadmium					
		Pb	Hg	Cr+6	Cd	PBB	PBDE
	<1000ppm	<1000ppm	<1000ppm	<100ppm	<1000ppm	<1000ppm	
	O	O	O	O	O	O	

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.
X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.