

# Material Declaration Report



Package Type:	TSSOP 56L (6.1mm)
Pericom Package Code:	A56(Pb-free)
RoHS Compliance:	Yes
Applicable Exemption:	N/A

Component Weight (mg):	211.333
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):	40
Reflow Cycles:	3
Rev Date:	12/2/2008

## Homogeneous Material Declaration

MATERIAL ITEM	MATERIAL WEIGHT(mg)	ASSEMBLY SUBCON	MATERIAL COMPOSITION	CAS NO.	COMPOSITION %	COMPOSITION WEIGHT(mg)
MOLD COMPOUND	135.039	OSE	Silica Fused	60676-86-0	89.800	121.2647
			Epoxy Resin	Proprietary	5.000	6.7519
			Phenolic Resin	Proprietary	4.000	5.4015
			Others	Proprietary	1.000	1.3504
			Carbon Black	1333-86-4	0.200	0.2701
		SPEL	Silica Fused	60676-86-0	88.000	118.8340
			Epoxy Resin	Proprietary	5.000	6.7519
			Phenolic Resin	Proprietary	4.500	6.0767
			Epoxy, Cresol Novolac	29690-82-2	2.000	2.7008
			Carbon Black	1333-86-4	0.500	0.6752
LEADFRAME	67.786		Copper (Cu)	7440-50-8	94.900	64.4919
			Nickel (Ni)	7440-02-0	3.200	2.1692
			Silicon (Si)	7440-21-3	0.720	0.5152
			Magnesium (Mg)	7439-95-4	0.180	0.4915
			Silver(Ag)	7440-22-4	1.000	0.1186
SILICON DIE	3.310		Silicon (Si)	7440-21-3	99.192	3.2830
			Non-hazardous Metal	Proprietary	0.808	0.0267
DIE ATTACH EPOXY	0.287	OSE	Silver	7440-22-4	76.000	0.2183
			Acrylic Resin	Proprietary	8.000	0.0230
			Acrylate	Proprietary	5.500	0.0158
			Polybutadiene derivative	Proprietary	5.500	0.0158
			Epoxy resin	Proprietary	2.500	0.0072
		SPEL	Additive	Proprietary	1.000	0.0029
			Butadiene copolymer	Proprietary	1.000	0.0029
			Peroxide	Proprietary	0.500	0.0014
			Silver	7440-22-4	80.000	0.2298
			Epoxy Resin	9003-36-5	10.000	0.0287
	Diluent	26447-14-3	6.000	0.0172		
	Hardener	620-92-8	3.250	0.0093		
	Dicyandamide	461-58-5	0.750	0.0022		
	GOLD WIRE	0.888		Gold(Au)	7440-57-5	99.990
Impurities				-	0.010	0.0001
SOLDER PLATING	4.023		Tin (Sn)	7440-31-5	99.990	4.0230
			Impurities	-	0.010	0.0004

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
Device						
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	<b>Declaration Statement:</b>	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	<100ppm	<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.