

Material Declaration Report



Package Type:	LQFP 80L (12X12mm)
Pericom Package Code:	FF80(Pb-free)
RoHS Compliance:	Yes
Applicable Exemption:	N/A

Component Weight (mg):	498.500
Termination Plating:	Matte Tin
JESD 97 Pb-free Category:	e3
Plating Thickness (um):	10-20
Tin Whisker Mitigation:	Anneal, 150C/1hr

MSL Rating:	3
Peak Body Temp (C):	260
Max Time (sec):	30
Reflow Cycles:	3
Rev Date:	5/5/2009

Homogeneous Material Declaration

MATERIAL ITEM	MATERIAL WEIGHT(mg)	ASSEMBLY SUBCON	MATERIAL COMPOSITION	CAS NO.	COMPOSITION %	COMPOSITION WEIGHT(mg)
MOLD COMPOUND	299.100	Greatek	Epoxy Resin	Proprietary	5.000	14.9550
			Epoxy, Cresol Novolac	29690-82-2	2.500	7.4775
			Phenol Resin	Proprietary	5.000	14.9550
			Carbon Black	1333-86-4	0.500	1.4955
			Silica fused	60676-86-0	81.000	242.2708
			Silica fused	7631-86-9	5.500	16.4505
			Silica crystalline	14808-60-7	0.500	1.4955
		ASEM	Epoxy Resin -1	Proprietary	3.000	8.9730
			Epoxy Resin -2	Proprietary	2.000	5.9820
			Phenol resin	Proprietary	3.000	8.9730
			Aromatic phosphate	Proprietary	1.000	2.9910
			Carbon Black	1333-86-0	0.200	0.5982
			Silica	60676-86-0	89.800	268.5916
			Others	Proprietary	1.000	2.9910
LEADFRAME	159.520		Copper (Cu)	7440-50-8	94.900	151.3843
			Nickel (Ni)	7440-02-0	3.200	5.1046
			Silicon (Si)	7440-21-3	0.720	1.1485
			Magnesium (Mg)	7439-95-4	0.180	0.2871
			Silver(Ag)	7440-22-4	1.000	1.5952
SILICON DIE	24.028		Silicon (Si)	7440-21-3	99.192	23.8335
			Non-hazardous Metal	Proprietary	0.808	0.1941
DIE ATTACH EPOXY	0.399	Greatek	Silver	7440-22-4	67.000	0.2675
			Epoxy Resin	Proprietary	15.000	0.0599
			Aliphatic anhydride	Proprietary	8.000	0.0319
			2-Butoxyethyl acetate	112-07-2	5.000	0.0200
			Polymeric material	Proprietary	5.000	0.0200
		ASEM	Silver	7440-22-4	76.000	0.3034
			Epoxy Resin	9003-36-5	13.000	0.0519
			t-Butyl pnenyl glycdyl ether	3101-60-8	7.000	0.0279
			Phenolic resin	9003-35-4	3.000	0.0120
			Epoxy silane	2530-83-8	1.000	0.0040
GOLD WIRE	0.498		Gold(Au)	7440-57-5	99.990	0.4984
			Impurities	-	0.010	0.0000
SOLDER PLATING	14.955		Tin (Sn)	7440-31-5	99.990	14.9535
			Impurity	-	0.010	0.0015

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	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																					
		<table border="1"> <thead> <tr> <th>Pb</th> <th>Hg</th> <th>Cr+6</th> <th>Cd</th> <th>PBB</th> <th>PBDE</th> </tr> </thead> <tbody> <tr> <td><1000ppm</td> <td><1000ppm</td> <td><1000ppm</td> <td><100ppm</td> <td><1000ppm</td> <td><1000ppm</td> </tr> <tr> <td>O</td> <td>O</td> <td>O</td> <td>O</td> <td>O</td> <td>O</td> </tr> </tbody> </table>						Pb	Hg	Cr+6	Cd	PBB	PBDE	<1000ppm	<1000ppm	<1000ppm	<100ppm	<1000ppm	<1000ppm	O	O	O	O
Pb	Hg	Cr+6	Cd	PBB	PBDE																		
<1000ppm	<1000ppm	<1000ppm	<100ppm	<1000ppm	<1000ppm																		
O	O	O	O	O	O																		
and																							
China RoHS Directive SJ/T11363-2006																							
		<p>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.</p> <p>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.</p>																					