

Material Declaration Report



Package Type:	PBGA 304L
Pericom Package Code:	NA304(Pb-free)
RoHS Compliance:	Yes
Applicable Exemption:	N/A

Component Weight (mg):	3509.1000
Termination Plating:	SnAgCu
JESD 97 Pb-free Category:	e1
Plating Thickness (um):	N/A
Tin Whisker Mitigation:	N/A

MSL Rating:	3
Peak Body Temp (C):	250
Max Time (sec):	30
Reflow Cycles:	3
Rev Date:	12/8/2009

Homogeneous Material Declaration

MATERIAL ITEM	MATERIAL WEIGHT(mg)	ASSEMBLY SUBCON	MATERIAL COMPOSITION	CAS NO.	COMPOSITION %	COMPOSITION WEIGHT(mg)
MOLD COMPOUND	1749.6373	OSE	Silica Fused	60676-86-0	85.0000	1487.1917
			Epoxy Resin	Trade secret	7.0000	122.4746
			Metal Hydroxide	Trade secret	3.0000	52.4891
			Phenol Resin	Trade secret	3.0000	52.4891
			Carbon Black	1333-86-4	2.0000	34.9927
SUBSTRATE	1181.5140		Copper	7440-50-8	51.0138	602.7352
			Nickel	7440-02-0	29.0700	343.4661
			Continuous Filament Fiber Glass	65997-17-3	7.3488	86.8271
			Epoxy Resin	9003-36-5	6.4302	75.9737
			Bismaleimide /Triazine	105391-33-1 / 25722-66-1	0.9186	10.8534
			Inorganic Filler	24623-77-6 / 21645-51-2 / 61583-60-6 / 60676-86-0	0.9186	10.8534
			Gold	7440-57-5	0.6700	7.9161
			Morpholine derivative	Trade secret	3.6300	42.8890
SILICON DIE	35.7928		Silicon (Si)	7440-21-3	99.1920	35.5036
			Non-hazardous Metal	Proprietary	0.8080	0.2892
DIE ATTACH EPOXY	2.4564		Silver	7440-22-4	80.0000	1.9651
			Diester Resin	Proprietary	10.0000	0.2456
			Acrlate Resin	Proprietary	7.0000	0.1719
			Polymeric Resin	Proprietary	3.0000	0.0737
GOLD WIRE	10.5273		Gold(Au)	7440-57-5	99.9900	10.5262
			Impurities	-	0.0100	0.0011
SOLDER BALL	529.1723		Tin(Sn)	7440-31-5	95.5000	505.3595
			Silver(Ag)	7440-22-4	4.0000	21.1669
			Copper(Cu)	7440-50-8	0.5000	2.6459

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
Substrate	<2	<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 Ball	<95	<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																	
	<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> <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. 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>	Pb	Hg	Cr+6	Cd	PBB	PBDE	<1000ppm	<1000ppm	<1000ppm	<100ppm	<1000ppm	<1000ppm	O	O	O	O	O
Pb	Hg	Cr+6	Cd	PBB	PBDE													
<1000ppm	<1000ppm	<1000ppm	<100ppm	<1000ppm	<1000ppm													
O	O	O	O	O	O													