

Material Declaration Report

Package Type:	LFBGA 160L
Pericom Package Code:	NB160(Pb-free)
RoHS Compliance:	Yes
Applicable Exemption:	N/A
REACH Compliance:	Yes
Halogen Free:	Yes

Component Weight (mg):	383.000
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):	260
Max Time (sec):	30
Reflow Cycles:	3
Rev Date:	4/30/2010

Homogeneous Material Declaration

MATERIAL ITEM	MATERIAL WEIGHT(mg)	ASSEMBLY SUBCON	MATERIAL COMPOSITION	CAS NO.	COMPOSITION %	COMPOSITION WEIGHT(mg)
MOLD COMPOUND	180.179	ASE	Silica Epoxy resin Phenol resin	60676-86-0 Trade Secret Trade Secret	90.000 5.500 4.500	162.1608 9.9098 8.1080
SUBSTRATE	118.031		Copper AUS 308 Nickel plating Gold plating Copper plating BT material (GPHL830NX) BT material (CCL-HL832NX)	7440-50-8 Trade secret 7440-02-0 7440-57-5 7440-50-8 Not applicable Not applicable	13.540 13.890 1.390 0.350 4.170 38.880 27.780	15.9815 16.3946 1.6406 0.4131 4.9219 45.8906 32.7891
SILICON DIE	15.362		Silicon (Si) Non-hazardous Metal	7440-21-3 Proprietary	99.192 0.808	15.2375 0.1241
DIE ATTACH EPOXY	2.234		Silver Di-ester Resin Functionalized ester Polymeric Resin Epoxy Resin	7440-22-4 Proprietary Proprietary Proprietary Proprietary	80.000 10.000 6.000 2.000 2.000	1.7869 0.2234 0.1340 0.0447 0.0447
GOLD WIRE	2.376		Gold(Au) Impurities	7440-57-5 -	99.990 0.010	2.3757 0.0002
SOLDER BALL	64.819		Tin(Sn) Silver(Ag) Copper(Cu)	7440-31-5 7440-22-4 7440-50-8	96.500 3.000 0.500	62.5501 1.9446 0.3241

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>	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													
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.																		