

# Material Declaration Report



<b>Part Number:</b>	PI2EQX4402DNBE
<b>Package Type:</b>	LFBGA 84L
<b>Pericom Package Code:</b>	NB84 (Pb-free)
<b>RoHS Compliance:</b>	Yes
<b>Applicable Exemption:</b>	N/A
<b>Date of RoHS Compliant:</b>	Since Inception

<b>Component Weight (mg):</b>	213.200
<b>Termination Plating:</b>	SnAgCu
<b>JESD 97 Pb-free Category:</b>	e1
<b>Plating Thickness (um):</b>	N/A
<b>Tin Whisker Mitigation:</b>	N/A

<b>MSL Rating:</b>	3
<b>Peak Body Temp (C):</b>	260
<b>Max Time (sec):</b>	40
<b>Reflow Cycles:</b>	3
<b>Date:</b>	3/4/2008

## Homogeneous Material Declaration

ITEM	MATERIAL WEIGHT(mg)	MATERIAL COMPOSITION	CAS NO.	COMPOSITION %	COMPOSITION WEIGHT(mg)
MOLD COMPOUND	83.184	Silica fused Epoxy Resin Phenol Resin Metal Hydroxide Carbon Black	60676-86-0 Proprietary Proprietary Proprietary 1333-86-4	84.000 7.000 2.500 2.500 4.000	69.8747 5.8229 2.0796 2.0796 3.3274
SUBSTRATE	69.774	Gold Nickel Continuous Filament Fiber Glass Copper Bismaleimide /Triazine Epoxy Resin Inorganic Filler Morpholine derivative	7440-57-5 7440-02-0 65997-17-3 7440-50-8 13676-54-5 / 25722-66-1 29690-82-2 / 68541-56-0 / 25068-38-6 13776-74-4 / 7631-86-9 Trade secret	0.670 29.070 7.350 51.010 0.920 6.430 0.920 3.630	0.4675 20.2833 5.1284 35.5917 0.6419 4.4865 0.6419 2.5328
SILICON DIE	3.810	Silicon (Si) Non-hazardous Metal	7440-21-3 Proprietary	99.192 0.808	3.7791 0.0308
DIE ATTACH EPOXY	2.494	Silver Polymeric Resin Diester Resin Acriate Resin	7440-22-4 Proprietary Proprietary Proprietary	80.000 3.000 10.000 7.000	1.9955 0.0748 0.2494 0.1746
GOLD WIRE	1.075	Gold(Au) Impurities	7440-57-93 -	99.990 0.010	1.0744 0.0001
SOLDER BALL	52.861	Tin(Sn) Silver(Ag) Copper(Cu)	7440-31-5 7440-22-4 7440-50-8	96.500 3.000 0.500	51.0107 1.5858 0.2643

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	<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	<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
and China RoHS Directive SJ/T11363-2006		<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.