

# Material Declaration Report



Package Type:	TQFN 42L
Pericom Package Code:	ZH42 (Pb-free)
RoHS Compliance:	Yes
Applicable Exemption:	N/A
REACH Compliance:	Yes
Halogen Free:	Yes

Component Weight (mg):	73.0000
Termination Plating:	NiPdAu
JESD 97 Pb-free Category:	e4
Plating Thickness (um):	0.5-2.2
Tin Whisker Mitigation:	N/A

MSL Rating:	1
Peak Body Temp (C):	260
Max Time (sec):	30
Reflow Cycles:	3
Rev Date:	2012/7/12

## Homogeneous Material Declaration

MATERIAL ITEM	MATERIAL WEIGHT(mg)	ASSEMBLY SUBCON	MATERIAL COMPOSITION	CAS NO.	COMPOSITION %	COMPOSITION WEIGHT(mg)
MOLD COMPOUND	55.2500	GTK	Epoxy Resin A	Trade secret	5.000	2.7625
			Epoxy Resin B	Trade secret	2.500	1.3813
			Phenol Resin	Trade secret	5.000	2.7625
			Metal Hydroxide	Trade secret	3.000	1.6575
			Carbon Black	1333-86-4	0.500	0.2763
			Silica fused	60676-86-0	68.500	37.8463
			Silica fused	7631-86-9	15.000	8.2875
			Silica crystalline	14808-60-7	0.500	0.2763
LEADFRAME	14.4802		Copper	7440-50-8	95.740	13.8633
			Iron	7439-89-6	2.310	0.3345
			Zinc	7440-66-6	0.120	0.0174
			Phosphorous	7723-14-0	0.080	0.0116
			Nickel(Ni)	7440-02-0	1.580	0.2288
			palladium(Pd)	7440-05-3	0.150	0.0217
Gold(Au)	7440-57-5	0.020	0.0029			
SILICON DIE	2.5900		Silicon (Si)	7440-21-3	100.000	2.5900
DIE ATTACH EPOXY	0.2548		Silver	7440-22-4	71.000	0.1809
			Epoxy resin A	9003-36-5	5.000	0.0127
			Epoxy resin B	Trade secret	6.000	0.0153
			Epoxy resin C	Trade secret	6.000	0.0153
			Acrylate	Trade secret	6.000	0.0153
			Phenolic Hardener	Trade secret	5.000	0.0127
			Dicyandiamide	461-58-5	0.300	0.0008
			Organic peroxide	Trade secret	0.700	0.0018
WIRE BOND	0.4250		Copper	7440-50-8	97.300	0.4135
			Palladium	7440-05-3	2.700	0.0115

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	<2	<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	<1000ppm	<1000ppm	<100ppm	<1000ppm	<1000ppm	
	O	O	O	O	O	O	
<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>							