

Material Declaration Report



Package Type:	TQFN 32L
Pericom Package Code:	ZH32(Pb-free)
RoHS Compliance:	Yes
Applicable Exemption:	N/A

Component Weight (mg):	60.380
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:	2011/4/29

Homogeneous Material Declaration

MATERIAL ITEM	MATERIAL WEIGHT(mg)	ASSEMBLY SUBCON	MATERIAL COMPOSITION	CAS NO.	COMPOSITION %	COMPOSITION WEIGHT(mg)
MOLD COMPOUND (CEL 9220ZHF10L, HITACHI)	24.180	SPEL	Epoxy Resin-1	Trade secret	1.75	0.423
			Epoxy Resin-2	Trade secret	1.75	0.423
			Epoxy Resin-3	Trade secret	1.75	0.423
			Phenol resin	Trade secret	3.50	0.846
			Carbon Black	1333-86-4	0.10	0.024
			Silica	60676-86-0	91.15	22.040
LEADFRAME (DCI, C194FH)	32.123		Copper	7440-50-8	96.23	30.9118
			Iron	7439-89-6	2.30	0.7388
			Phosphorus	7723-14-0	0.08	0.0263
			Zinc	7440-66-6	0.13	0.0402
			Nickel	7440-02-0	1.15	0.3694
			Palladium	7440-05-3	0.10	0.0321
			Gold	7440-57-5	0.02	0.0048
SILICON DIE	1.325		Silicon (Si)	7440-21-3	99.1920	1.3147
			Non-hazardous Metal	Proprietary	0.8080	0.0000
			Non-hazardous Metal	Proprietary	0.8080	0.0107
DIE ATTACH EPOXY (CRM, 1076NS,SUMITOMO)	2.282		Silver	7440-22-4	80.0000	1.8255
			Epoxy resin	9003-36-5	10.0000	0.2282
			Diluent	26447-14-3	6.0000	0.1369
			Dicyandiamide	461-58-5	0.5000	0.0114
			Hardener	620-92-8	3.5000	0.0799
GOLD WIRE (AW99,Heraeus)	0.470		Gold(Au)	7440-57-5	99.9900	0.4699
			Impurities	-	0.0100	0.0000

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	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					
		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.