



PACKAGE MATERIAL DECLARATION DATASHEET

Cypress Package Code	SZ	Body Size (mil/mm)	300 mils
Package Weight – Site 1	850 mg	Package Weight – Site 2	NA

SUMMARY

The 28L- SOIC Pb-Free package is compliant to RoHS. Cypress Ordering Part Numbers containing an “X” (e.g. CY7C1328G-133AXI, CY2308SXC-1HT) meet the Directive 2002/95/EC (RoHS) requirement.

ASSEMBLY Site 1 – Package Qualification Report # 030802 (Note 1)

I. DECLARATION OF PACKAGED UNITS

A. BANNED SUBSTANCES

Materials from Level A of the EIA/JIG/JGPSSI/EICTA Material Composition Declaration Guide and EU RoHS. Listed in the table below are materials that are neither contained nor intentionally added to this product.

Substances / Compounds	Weight by mg	PPM	Analysis Report (Note 2)
Cadmium and Cadmium Compounds	0	< 5.0	CoA-SZ28-R
Hexavalent Chromium and its Compounds	0	< 5.0	
Lead and Lead Compounds	0	< 5.0	
Mercury and Mercury Compounds	0	< 5.0	
Polybrominated Biphenyls (PBB)	0	< 5.0	
Polybrominated Diphenylethers (PBDE)	0	< 5.0	
Asbestos	0	0	As per MSDS
Azo colorants	0	0	As per MSDS
Ozone Depleting Substances	0	0	As per MSDS
Polychlorinated Biphenyls (PCBs)	0	0	As per MSDS
Polychlorinated Napthalenes	0	0	As per MSDS
Radioactive Substances	0	0	As per MSDS
Shortchain Chlorinated Paraffins	0	0	As per MSDS
Tributyl Tin (TBT) and Triphenyl Tin (TPT)	0	0	As per MSDS
Tributyl Tin Oxide (TBTO)	0	0	As per MSDS
FormaldehydeN/A	0	0	As per MSDS

Note 1: Qualification reports are available at www.cypress.com. Access them by doing a Search on the Report #.

Note 2: Report available from Cypress Sales Offices or Distributors.

Note 3: Materials/substances not declared in Section I-A and I-B of this document are considered “non-existent in the product”. In order to report exactly 100% material composition, some numbers were rounded to the nearest 0.01 percent. Cypress Semiconductor material information are calculated using MSDS, Material Analysis Reports and Cypress Assembly sites information



B. MATERIAL COMPOSITION (Note 3)

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	PPM	%
Leadframe	Base Material	Cu	7440-50-8	294.53	346,503	34.65%
		Fe	7439-89-6	7.26	8,537	0.85%
		P	7723-14-0	0.21	249	0.02%
		Zn	7440-66-6	0.36	427	0.04%
Lead Finish	External Plating	Ni	7440-02-0	0.19	221	0.02%
		Pd	7440-05-3	0.01	11	0.00%
		Au	7440-57-5	0.00	4	0.00%
Die Attach	Adhesive	Ag	7440-22-4	0.17	197	0.02%
		Bismaleimide	-----	0.02	28	0.00%
		Polymer	-----	0.01	15	0.00%
		Methacrylate	-----	0.00	5	0.00%
		Acylate ester	-----	0.00	5	0.00%
		Organic Peroxide	-----	0.00	3	0.00%
Die	Circuit	Si	7440-21-3	3.00	3,533	0.35%
Wire	Interconnect	Au	7440-57-5	1.90	2,238	0.22%
Mold Compound	Encapsulation	Fused Silica	-----	400.77	471,500	47.15%
		Solid Epoxy Resin	-----	54.23	63,802	6.38%
		Phenol Resin	-----	59.66	70,183	7.02%
		Antimony Trioxide	-----	7.05	8,294	0.83%
		Crystalline Silica	-----	16.27	19,141	1.91%
		Carbon Black	-----	4.34	5,104	0.51%

Package Weight (mg): **% Total:**

II. DECLARATION OF PACKAGING / INDIRECT MATERIALS

Type	Material	Cadmium PPM	Mercury PPM	Analysis Report (Note2)
Tape & Reel	Cover tape	< 5.0	< 5.0	CoA-COVT-R
	Carrier tape	< 5.0	< 5.0	CoA-CART-R
	Plastic Reel	< 5.0	< 5.0	CoA-PLRL-R
Tray		N/A	N/A	N/A
Tube	Plastic Tube	< 5.0	< 5.0	CoA-PLTB-R
	End Plug	< 5.0	< 5.0	CoA-EPLG-R
	End Pin	< 5.0	TBD	CoA-EPIN-R
Others	Moisture Barrier bag	< 5.0	< 5.0	CoA-MBBG-R
	Shielding bag	< 5.0	< 5.0	CoA-SBAG-R
	Protective Band	< 5.0	< 5.0	CoA-PROB-R
	Shipping and inner/ pizza box	< 5.0	< 5.0	CoA-ABOX-R
	Desiccant	< 5.0	< 5.0	CoA-DESS-R
	Bubble Pack	< 5.0	< 5.0	CoA-BUBP-R

Note 1: Qualification reports are available at www.cypress.com. Access them by doing a Search on the Report #.

Note 2: Report available from Cypress Sales Offices or Distributors.

Note 3: Materials/substances not declared in Section I-A and I-B of this document are considered "non-existent in the product". In order to report exactly 100% material composition, some numbers were rounded to the nearest 0.01 percent. Cypress Semiconductor material information are calculated using MSDS, Material Analysis Reports and Cypress Assembly sites information

Document History Page

Document Title: 28L-SOIC Pb-Free PMDD
Document Number: 001-03052

Rev.	ECN No	Orig. of Change	Description of Change
**	385598	GFJ	New document

Distribution: E-CML

Posting: None

Note 1: Qualification reports are available at www.cypress.com. Access them by doing a Search on the Report #.

Note 2: Report available from Cypress Sales Offices or Distributors.

Note 3: Materials/substances not declared in Section I-A and I-B of this document are considered "non-existent in the product". In order to report exactly 100% material composition, some numbers were rounded to the nearest 0.01 percent. Cypress Semiconductor material information are calculated using MSDS, Material Analysis Reports and Cypress Assembly sites information