



**PACKAGE MATERIAL DECLARATION DATASHEET**

<b>Cypress Package Code</b>	JZ	<b>Body Size (mil/mm)</b>	450x550 mil
<b>Package Weight – Site 1</b>	1,384 mg	<b>Package Weight – Site 2</b>	N/A

**SUMMARY**

The 32L-PLCC 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 # 034601 (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-JZ32-M
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	
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
Formaldehyde	0	0	As per MSDS

Note 1: Qualification reports are available at [www.cypress.com](http://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	335.56	242,454	24.25%
		Zr	7440-67-7	0.34	243	0.02%
		Ag	7440-22-4	1.46	1,058	0.11%
Lead Finish	External Plating	Sn	7440-31-5	16.15	11,670	1.17%
Die Attach	Adhesive	Resin	-----	0.07	54	0.01%
		Ag	7440-22-4	0.75	539	0.05%
		Mixed aryl allyl glycidyl compounds	-----	0.03	23	0.00%
		Amine	-----	0.05	38	0.00%
		Gamma Butyrolactone	96-48-0	0.05	38	0.00%
		Diglycidylether of bisphenol-F	-----	0.11	77	0.01%
Die	Circuit	Si	7440-21-3	3.70	2,676	0.27%
Wire	Interconnect	Au	7440-57-5	1.01	732	0.07%
		Ag	7440-22-4	0.00	0	0.00%
		Ca	7440-70-2	0.00	0	0.00%
Mold Compound	Encapsulation	Multi-aromatic resin	-----	76.85	55,530	5.55%
		SiO <sub>2</sub>	60676-86-0	881.25	636,742	63.67%
		Carbon black	1333-86-4	5.12	3,702	0.37%
		Cresol Novolac Epoxy	-----	20.49	14,808	1.48%
		Phenol resin	26834-02-6	40.99	29,616	2.96%

**Package Weight (mg):** 1,384    **% Total:** 100

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**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	Tray	N/A	N/A	N/A
Tube	Plastic Tube	< 5.0	< 5.0	CoA-PLTB –R CoA-PLTB –M
	End Plug	< 5.0	< 5.0	CoA-EPLG –R CoA-EPLG –M
	End Pin	< 5.0	TBD	CoA-EPIN –R
Others	Moisture Barrier bag	< 5.0	< 5.0	CoA-MBBG-R CoA-MBBG-M
	Shielding bag	< 5.0	< 5.0	CoA-SBAG –R CoA-SBAG –M
	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

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## Document History Page

Document Title: 32L - PLCC Pb-Free PMDD  
Document Number: 001-04292

Rev.	ECN No.	Orig. of Change	Description of Change
**	390462	YXP	New document.
*A	391923	YXP	Revised section II of the document to reflect both Amkor and CML's indirect materials, where applicable.

Distribution: E-CML

Posting: None

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