

PACKAGE MATERIAL DECLARATION DATASHEET

Cypress Package Code	BW	Body Size (mil/mm)	14 x 22 mm
Package Weight – Site 1	1,310.0100 mg	Package Weight – Site 2	N/A

SUMMARY

The 119- BGA 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 #s 044005/ 043301 (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-BW119-G
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
Formaldehyde	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

Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.

B. MATERIAL COMPOSITION (Note 3)

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	% weight of substance per Homogenous material	PPM	% weight of substance per package
Substrate	Base Material	SiO ₂	60676-86-0	41.6735	11.0000%	31,812	3.1812%
		Acrylic	29690-82-2	37.8471	9.9900%	28,891	2.8891%
		Epoxy	68541-56-0	30.2701	7.9900%	23,107	2.3107%
		Bisphenol	13676-54-5	56.8654	15.0100%	43,408	4.3408%
		Triazol	25722-66-1	66.2988	17.5000%	50,609	5.0609%
		Cu	7440-50-8	137.9393	36.4100%	105,296	10.5296%
		Ni	7440-02-0	5.6449	1.4900%	4,309	0.4309%
		Au	7440-57-5	2.0837	0.5500%	1,591	0.1591%
		Br	-----	0.2273	0.0600%	174	0.0174%
Solder Ball	External Plating	Sn	7440-31-5	193.7886	95.5000%	147,929	14.7929%
		Ag	7440-22-4	8.1168	4.0000%	6,196	0.6196%
		Cu	7440-50-8	1.0146	0.5000%	774	0.0774%
Die Attach	Adhesive	Silica Fused	60676860	71.1265	47.5000%	54,295	5.4295%
		Diester	-----	36.1622	24.1500%	27,605	2.7605%
		Epoxy Resin	-----	7.2175	4.8200%	5,509	0.5509%
		Functionalized Esters	-----	13.2370	8.8400%	10,105	1.0105%
		Polymetric Resin	-----	3.9232	2.6200%	2,995	0.2995%
		Filler	9002-84-0	7.7266	5.1600%	5,898	0.5898%
		Bismaleimide	-----	6.2891	4.2000%	4,801	0.4801%
		Methacrylates	-----	2.7552	1.8400%	2,103	0.2103%
		Divinyl ether	-----	0.9134	0.6100%	697	0.0697%
		Polymer	-----	0.3893	0.2600%	297	0.0297%
Die	Circuit	Si	7440-21-3	75.5900	100.0000%	57,702	5.7702%
Wire	Interconnect	Au	7440-57-5	4.9800	100.0000%	3,801	0.3801%
Mold Compound	Encapsulation	Silica Fused	60676860	443.1577	89.0000%	338,286	33.8286%
		Epoxy Resin	-----	27.3861	5.5000%	20,905	2.0905%
		Phenolic Resin	-----	27.3861	5.5000%	20,905	2.0905%

Package Weight (mg): 1,310.0100
% Total: 100.0000

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Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.

II. DECLARATION OF PACKAGING / INDIRECT MATERIALS

Type	Material	Lead PPM	Cadmium PPM	Cr VI PPM	Mercury PPM	PBB PPM	PBDE PPM	Analysis Report (Note2)
Tape & Reel	Cover tape	< 2.0	< 2.0	< 2.0	< 2.0	< 50.00	< 45.00	CoA-COVT-R
	Carrier tape	< 2.0	< 2.0	< 2.0	< 2.0	< 50.00	< 45.00	CoA-CART-R
	Plastic Reel	< 5.0	< 5.0	< 5.0	< 10.0	<50.0	<45.0	CoA-PLRL-R
Tray	Tray	< 2.0	< 2.0	< 2.0	< 2.0	< 0.0005	< 0.0005	CoA-TRAY-R
Tube	Plastic Tube	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	End Plug	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	End Pin	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Others	Moisture Barrier Bag	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	CoA-MBBG -R

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Document History Page

Document Title: 119 - BGA (14 x 22 mm) Pb-Free Package Material Declaration Datasheet
Document Number: 001-04982

Rev.	ECN No.	Orig. of Change	Description of Change
**	398450	GFJ	New Specification
*A	1732984	DPT/HLR	Added Assembly Site 2 – Package Qualification Report # 073702. Changed cypress Logo Added % weight of substance per Homogenous Material and % weight of substance per package on the Material Composition for Assembly Site 1. Completed the RoHS Substances namely; Lead Cadmium, Mercury, Chromium VI, PBB and PBDE on Declaration of Packaging Indirect Materials table for Assembly Site 1. Replaced CML with WEB in the distribution
		DCon	
*B	2768585	VFR	Deleted Material Declaration for Site 2 and transferred to Spec # 001-05023.
*C	3083879	JARG	Corrected CAS number for Gold (Au) and Silver (Ag) on Material Composition Table.
		Dcon	Changed CML to WEB in distribution.
*D	3445871	JARG	Updated Material Composition Table for Assembly Site 1 to reflect 4 decimal places on values.

Distribution: WEB

Posting: None

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