

PACKAGE MATERIAL DECLARATION

Cypress Package Code	BW	Body Size (mil/mm)	17 x 17 mm
Package Weight – Site 1	955 mg	Package Weight – Site 2	

SUMMARY

The 256L-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 #072005 (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-BW256-AT
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

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	Plating 1	Au, metal & alloy	7440-57-5	0.63	0.09%	660	0.07%
			Ni, metal & alloy	7440-02-0	2.91	0.43%	3,042	0.30%
		Plating 2	Cu, metal & alloy	7440-50-8	642.46	94.48%	672,526	67.25%
		AUS308	Other acrylic/epoxy resin	-----	6.05	0.89%	6,334	0.63%
			Silica, crystalline quartz (SiO2)	14808-60-7	3.89	0.57%	4,071	0.41%
			Copper Phthalocyanine Green	1328-53-6	0.40	0.06%	423	0.04%
			1-Cyanoguanidine	461-58-5	0.11	0.02%	116	0.01%
		HL832 NX	BT Resin	13676-54-5 25722-66-1	10.36	1.52%	10,845	1.08%
			Fibrous-glass-wool	65997-17-3	13.19	1.94%	13,802	1.38%
Solder Ball	External Plating	Sn		7440-31-5	151.84	98.50%	158,947	15.89%
		Ag		7440-22-4	1.54	1.00%	1,614	0.16%
		Cu		7440-50-8	0.77	0.50%	807	0.08%
Die Attach	Adhesive	Ag		7440-22-4	4.20	70.00%	4,397	0.44%
		Epoxy Resin		Trade Secret	0.30	5.00%	314	0.03%
		Diester		Trade Secret	0.60	10.00%	628	0.06%
		Polymeric Resin		Trade Secret	0.30	5.00%	314	0.03%
		Functionalized Ester		Trade Secret	0.60	10.00%	628	0.06%
Die	Circuit	Si		7440-21-3	42.55	100.00%	44,541	4.45%
Wire	Interconnect	Au		7440-57-5	20.59	99.99%	21,557	2.16%
Mold Compound	Encapsulation	Fused Silica		60676-86-0	49.40	95.00%	51,712	5.17%
		Epoxy Resin		Trade Secret	1.04	2.00%	1,089	0.11%
		Phenol Resin		Trade Secret	0.26	0.50%	272	0.03%
		Phenol Novolac		9003-35-4	0.52	1.00%	544	0.05%
		Metal Hydroxide		Trade Secret	0.52	1.00%	544	0.05%
		Carbon Black		1333-86-4	0.26	0.50%	272	0.03%
Package Weight (mg):					955	% Total:		100

II. DECLARATION OF PACKAGING / INDIRECT MATERIALS

Type	Material	Lead PPM	Cadmium PPM	Cr VI PPM	Mercury PPM	PBB PPM	PBDE PPM	Analysis Report (Note2)
Tray	Tray	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	CoA-TRAY-R
Others	Shielding bag	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	CoA-SBAG -R
	Moisture Barrier bag	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	CoA-MBBG-R
	Shipping and Inner Box	< 10.0	< 4.0	< 4.0	< 5.0	-----	-----	CoA-ABOX-R
	Dessicant	< 10.0	< 2.0	< 2.0	< 1.0	< 3.0	< 3.0	CoA-DESS-R
	Bubble Pack	< 2.0	< 2.0	< 2.0	< 2.0	< 100.0	< 90.0	CoA-BUBP-R

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Document History Page

Document Title: 256-FBGA (17x17mm) PB-FREE PMDD
Document Number: 001-16200

Rev.	ECN No.	Orig. of Change	Description of Change
**	1177923	VFR	Initial release.
*A	3288651	MAHA DCon	Deleted the information for tubes, tape and reel, and protective band from Table II. DECLARATION OF PACKAGING / INDIRECT MATERIALS. Replaced inactive bookset CML with WEB in distribution list.

Distribution: WEB

Posting: None

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