100 – VFBGA (6x6x1.0 mm) Pb-Free Package

PACKAGE MATERIAL DECLARATION DATASHEET

Cypress Package Code	BZ	**Body Size (mil/mm)**	6x6x1.0 mm
Package Weight – Site 1	77 mg	**Package Weight – Site 2**	N/A

SUMMARY

The 100-VFBGA Pb-Free package is compliant to RoHS. Cypress Ordering Part Numbers containing an “X” (e.g. CY7C1328G-133A**X**I, CY2308S**X**C-1HT) meet the Directive 2002/95/EC (RoHS) requirement.

ASSEMBLY Site 1 – Package Qualification Report # 033105 (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-BZ100-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	PPM	%
Substrate	Base Material	SiO_2	60676-86-0	1.92	24,943	2.49%
		Acrylic	Trade Secret, 29690-82-2	1.75	22,735	2.27%
		Epoxy	68541-56-0, 25068-38-6	1.40	18,188	1.82%
		Bisphenol	13676-54-5	2.62	34,037	3.40%
		Triazol	25722-66-1	3.05	39,624	3.96%
		Cu	7440-50-8	6.35	82,441	8.24%
		Ni	7440-02-0	0.26	3,378	0.34%
		Au	7429-90-5	0.10	1,299	0.13%
		Br	Trade Secret	0.01	125	0.01%
Solder Ball	External Plating	Sn	7440-31-5	10.01	130,044	13.00%
		Ag	7440-22-4	0.42	5,456	0.55%
		Cu	7440-50-8	0.05	650	0.06%
Die Attach	Adhesive	Fused silica	60676-86-0	5.61	72,882	7.29%
		Diester	Trade Secret	2.86	37,155	3.72%
		Epoxy Resin	Trade Secret	0.57	7,405	0.74%
		Functionalized esters	Trade Secret	1.04	13,511	1.35%
		Polymeric resin	Trade Secret	0.31	4,027	0.40%
Die	Circuit	Silicon	7440-21-3	6.24	81,047	8.10%
Wire	Interconnect	Au	7429-90-5	1.95	25,385	2.54%
		Ion Impurities	Trade Secret	0.00	3	0.00%
Mold Compound	Encapsulation	Silica Fused	60676-86-0	27.11	352,141	35.21%
		Epoxy resin A	Trade Secret	1.68	21,762	2.18%
		Phenol resin	Trade Secret	1.68	21,762	2.18%

Package Weight (mg): 77 **% Total: 100**

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.

II. DECLARATION OF PACKAGING / INDIRECT MATERIALS

Type	Material	Cadmium PPM	Mercury PPM	Analysis Report (Note2)
Tape & Reel	Cover tape	N/A	N/A	N/A
	Carrier tape	N/A	N/A	N/A
	Plastic Reel	N/A	N/A	N/A
Tray	Tray	< 5.0	< 5.0	CoA-TRAY-G CoA-TRAY-R
Tube	Plastic Tube	N/A	N/A	N/A
	End Plug	N/A	N/A	N/A
Others	Moisture Barrier bag	< 5.0	< 5.0	CoA-MBBG-G CoA-MBBG-R
	Shielding bag	< 5.0	< 5.0	CoA-SBAG-G 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-G CoA-DESS-R
	Bubble Pack	< 5.0	< 5.0	CoA- BUBP-G 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
Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.

Document History Page

Document Title: 100 - VFBGA 6x6x1.0mm Pb-Free PMDD
Document Number: 001-05088

Rev.	ECN No.	Orig. of Change	Description of Change
**	399798	YXP	New specification.

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