PACKAGE MATERIAL DECLARATION DATASHEET

Cypress Package Code	SO3016	**Body Size (mil/mm)**	10.3 x 7.5 x 2.65mm
Package Weight – Site 1	B: 468.6285 mg	**Package Weight – Site 2**	NA

SUMMARY

The 8L-DFN package is compliant to RoHS. Cypress (Legacy Spansion Part) ordering part numbers containing an “F” (e.g. S29AL008J70B**FI**030) meet the Directive of 2002/95/ EC (Rohs) requirement.

ASSEMBLY Site: ASECL (AC)
Package Qualification Report #173402/173412 (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	Material Analysis report
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) - USING AUPDCU WIRE

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	% weight of substance per Homogenous material	PPM	% weight of substance per package
Lead Frame	Base Material	Copper(Cu)	7440-50-8	155.5112	97.3111%	331,843	33.1843%
		Iron(Fe)	7439-89-6	3.9446	2.4683%	8,417	0.8417%
		Zinc(Zn)	7440-66-6	0.2182	0.1365%	466	0.0466%
		Phosphorus(P)	7723-14-0	0.1343	0.0840%	287	0.0287%
Lead Finish	Internal Plating	Silver(Ag)	7440-22-4	2.0478	100.0000%	4,370	0.4370%
	External Plating	Matte tin(Sn)	7440-31-5	1.3975	100.0000%	2,982	0.2982%
Die Attach	Adhesive	Silver(Ag)	7440-22-4	0.4563	74.0000%	974	0.0974%
		Acrylic resin	Trade secret	0.0555	9.0000%	118	0.0118%
		Polybutadiene derivative	Trade secret	0.0308	5.0000%	66	0.0066%
		Butadiene copolymer	Trade secret	0.0092	1.5000%	20	0.0020%
		Acrylate	Trade secret	0.0370	6.0000%	79	0.0079%
		Epoxy resin	Trade secret	0.0154	2.5000%	33	0.0033%
		Peroxide	Trade secret	0.0031	0.5000%	7	0.0007%
		Additive	Trade secret	0.0092	1.5000%	20	0.0020%
Die	Circuit	Silicon	7440-21-3	5.2231	100.0000%	11,145	1.1145%
Wire	Interconnect	Copper(Cu)	7440-50-8	0.1086	97.8723%	232	0.0232%
		Palladium(Pd)	7440-05-3	0.0020	1.7977%	4	0.0004%
		Gold(Au)	7440-57-5	0.0004	0.3300%	1	0.0001%
Mold Compound	Encapsulation	Epoxy Resin	Trade secret	18.6739	6.2366%	39,848	3.9848%
		Phenol Resin	Trade secret	10.7527	3.5911%	22,945	2.2945%
		Silica(Amorphous) A	60676-86-0	216.1587	72.1914%	461,258	46.1258%
		Silica(Amorphous) B	76361-86-9	52.7636	17.6217%	112,592	11.2592%
		Carbon black	1333-86-4	1.0753	0.3591%	2,295	0.2295%

Package Weight (mg):	468.6285	% Total:	100.0000

II. DECLARATION OF PACKAGING INDIRECT MATERIALS

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

III.	Material	Lead PPM	Cadmium PPM	Cr VI PPM	Mercury PPM	PBB PPM	PBDE PPM	Analysis Report (Note2)
Tape & Reel	Cover tape	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	Material Analysis report
	Carrier tape	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
	Plastic Reel	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Tray	Tray	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
Others	Moisture Barrier bag	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
	Shielding bag	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
	Protective Band	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
	Shipping and inner/ pizza box	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
	Desiccant	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	

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: 16L-SOIC (10.3 x 7.5 x 2.65MM) PB-FREE PACKAGE MATERIAL DECLARATION DATASHEET
Document Number: 002-21742

Rev.	ECN No.	Orig. of Change	Description of Change
**	5932175	HGOO	New document

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